

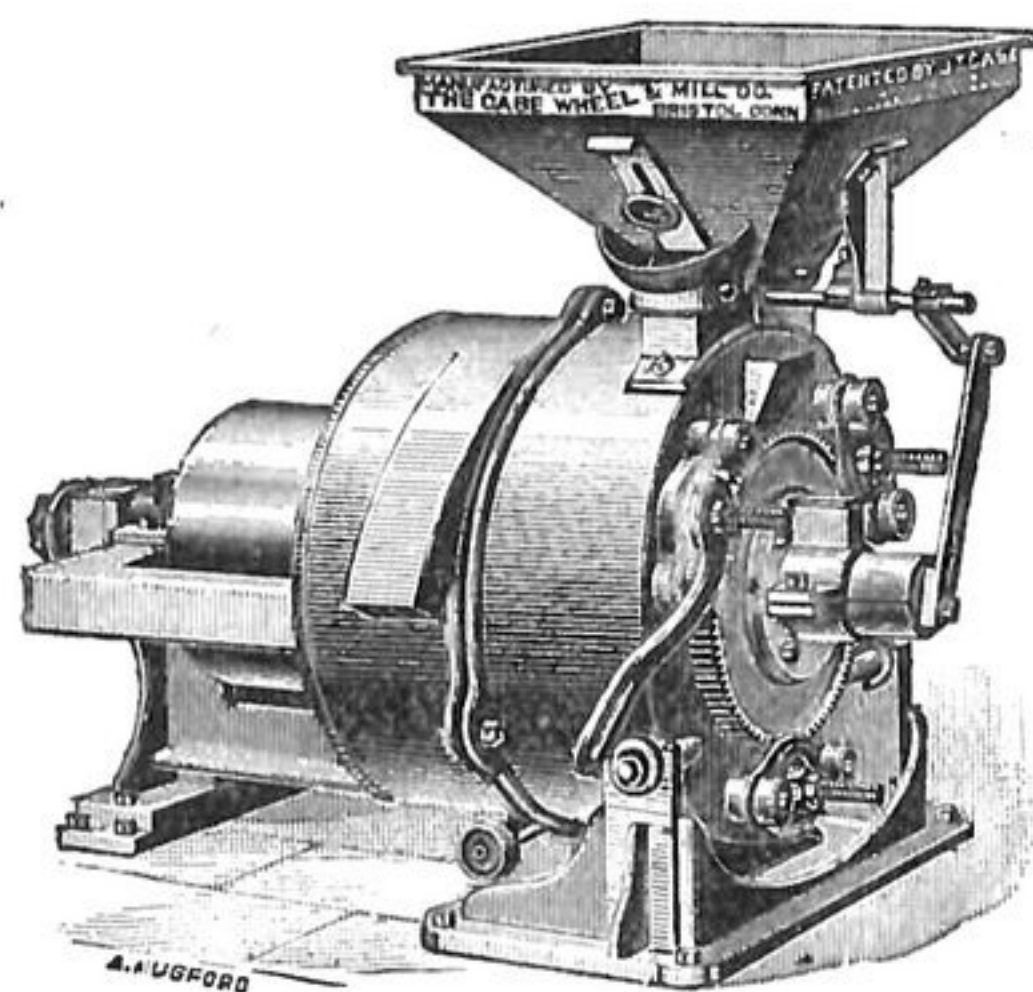
CHRONICLE OF THE GRAIN AND FLOUR TRADE

PUBLISHED EVERY MONDAY MORNING.

VOL. XIX. No 20.

BUFFALO, N. Y., JANUARY 14, 1889.

\$1.50 PER YEAR.



## VICTORY OVER ALL OTHERS. SINGLE & DOUBLE VERTICAL GRINDING MILLS.

(J. T. CASE'S PATENT.)

FACTS ARE MIGHTIER THAN ASSERTIONS. READ WHAT THEY SAY:

"Our 20-inch mill made by the Case Wheel & Mill Co. is in every respect satisfactory, easy to handle, and best results obtained of any mill in the country, with same quantity coal and power."—A. S. RUSSELL & Co., Meriden, Conn.

"Superior to any mill in use."—GEO. WESTON, Bristol, Conn.

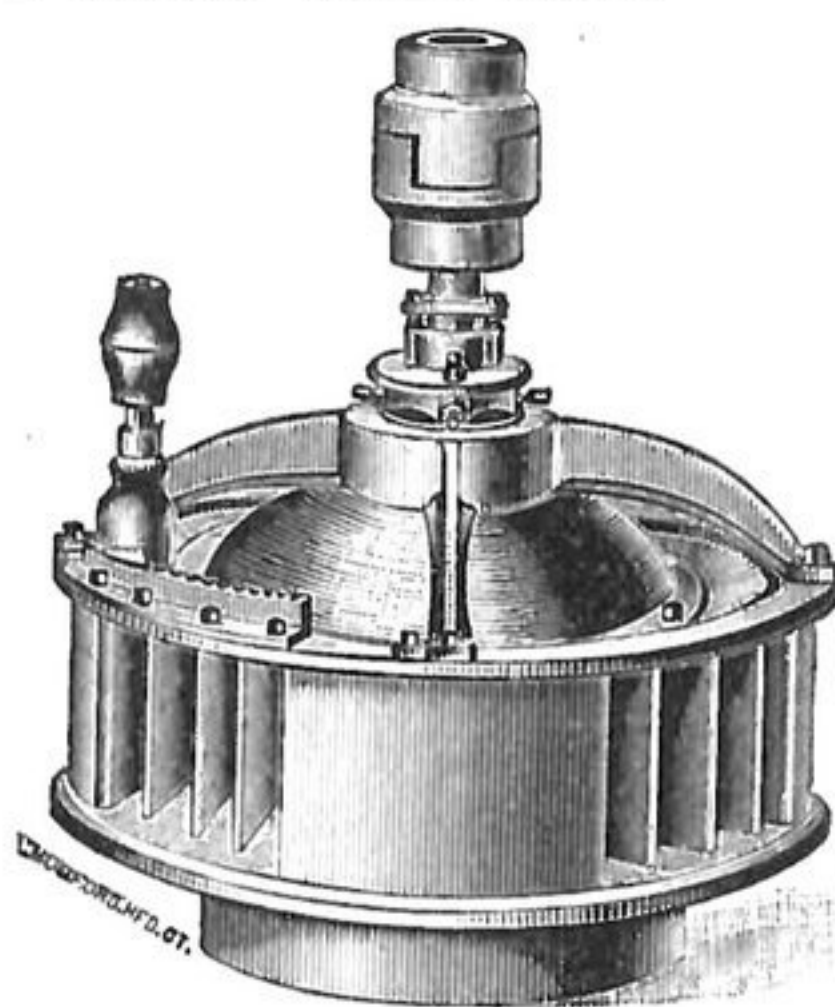
"The best satisfaction in quantity and quality."—CHILD'S ELEVATOR, Manchester, Ct.

"We take pleasure in recommending it."—GARLAND LINCOLN & Co., Worcester, Mass.

SEND FOR CATALOGUE—ILLUSTRATED AND DESCRIPTIVE.

## The Improved National Turbine Water Wheel

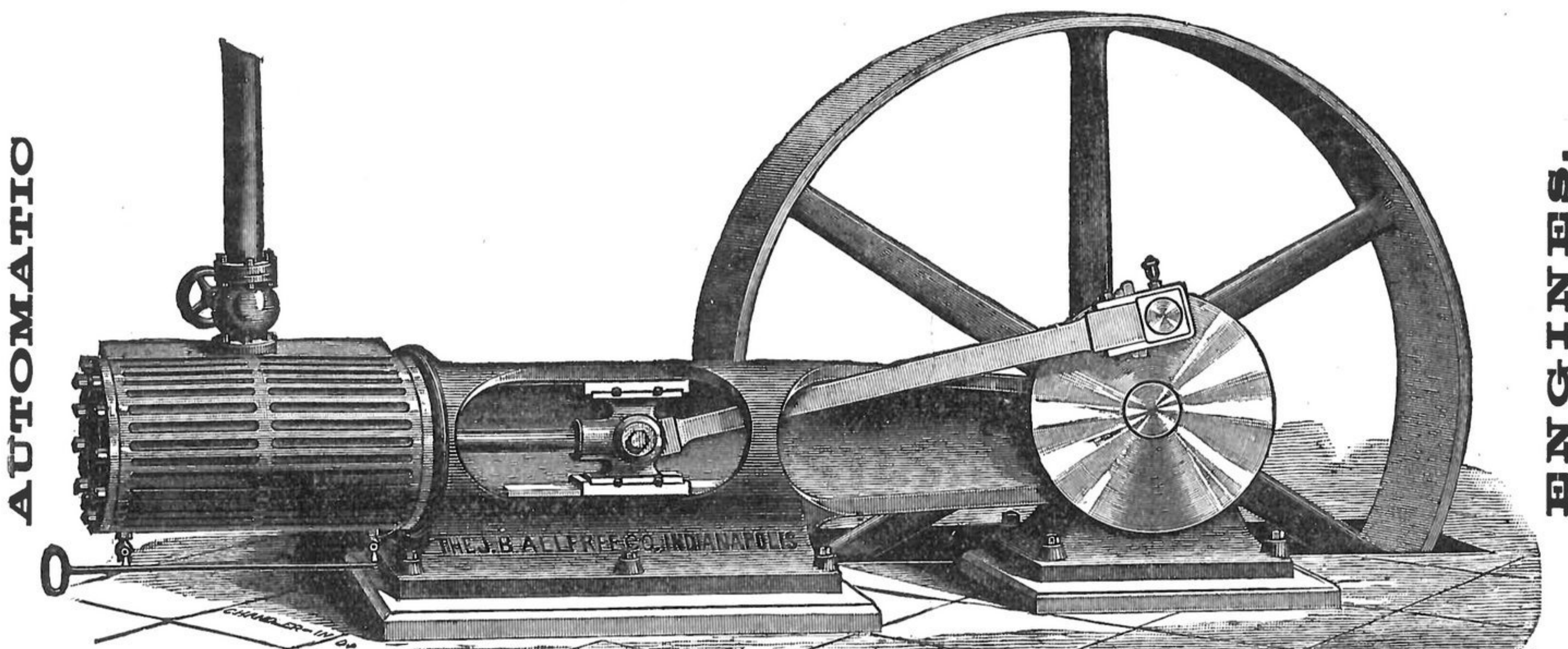
The Best for Economy; The Best for Durability; The Best for Power. ONE THOUSAND FIVE HUNDRED NATIONAL WATER WHEELS IN USE Prove that our Assertions are Supported by the Leading Manufacturers in the Country. Send for illustrated catalogue and prices to the manufacturers.



**The Case Wheel & Mill Co., Bristol, Conn.**

## NOTICE.

The J. B. ALLFREE CO., INDIANAPOLIS, IND., wish to inform their milling friends and the trade in general that they are prepared to build and equip throughout mills of any capacity in a style that can not be excelled. Bolting Cloth Trade a Specialty.



ORDERS RESPECTFULLY SOLICITED FOR SPECIAL MACHINES WHICH WE MANUFACTURE.

THE KEYSTONE FOUR ROLLER WHEAT MILL.

THE KEYSTONE FOUR HIGH CORN MILL.

THE SUCCESS BOLTER AND DRESSER.

THE J. B. ALLFREE PURIFIER.

THE J. B. ALLFREE CO.'S NEW BOLTING CHEST.

THE J. B. ALLFREE CENTRIFUGAL REEL.

THE CLIMAX BRAN DUSTER.

THE ALLFREE FLOUR PACKER.

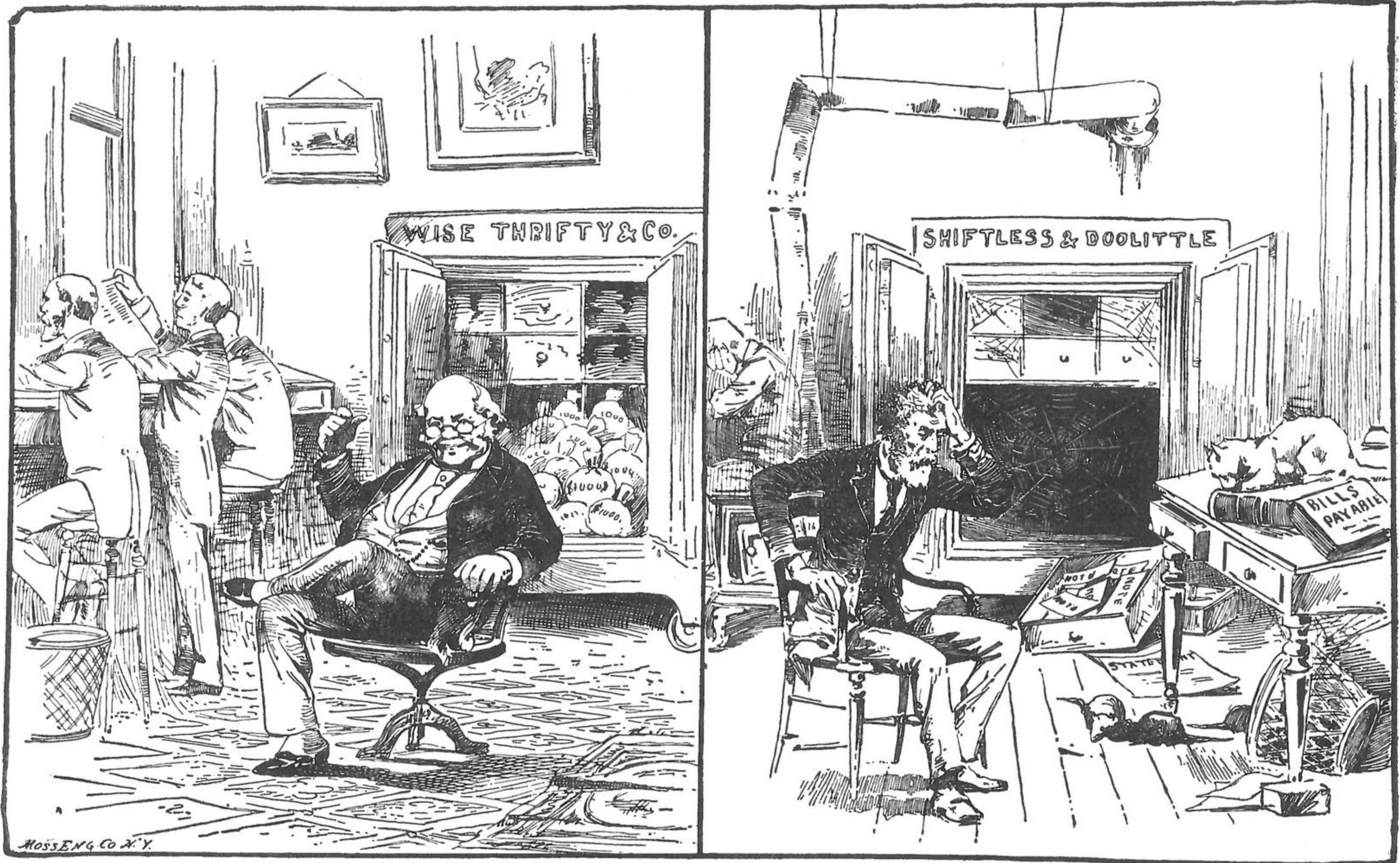
ADDRESS FOR ILLUSTRATED DESCRIPTIVE CATALOGUE,

**The J. B. Allfree Co., Indianapolis, Ind.**



# RIGHT TO THE POINT

"The best laid plans o' mice and men  
Gang aft aglea."  
But the Case Mill gets there every time,  
So all the millers say.



## "WE PUT IN A CASE SHORT SYSTEM MILL."

Old father Wise, with twinkling eyes,  
Points backward to the well-filled till,  
While Thrifty scans the new made plans  
To double up the CASE SHORT MILL.

## "WE DIDN'T!"

Old Shiftless weeps—the sick cat sleeps,  
Doolittle has gone out to pray,  
The spiders fill the empty till,  
While hungry rats now hold full sway.

## JUST TAKE A LOOK AT WHAT THIS MAN WRITES:

THE CASE MFG. CO., COLUMBUS, OHIO.

ELYRIA, OHIO, OCT. 10, 1888.

*Gentlemen:* Enclosed please find settlement in full of my account. The 4-break mill works splendid and am well pleased with it. The Inter-Elevator Flour Dressers are everything you represent, both in capacity and excellence of work. The Special Purifiers are a fine machine and far ahead of the Purifiers you put in my other mill in '83. Am especially pleased with the millwright work. It is well planned and finished in a good, workmanlike manner. I can not praise your millwright and his work too highly.

Yours resp'y,

GARRET REUBLIN.

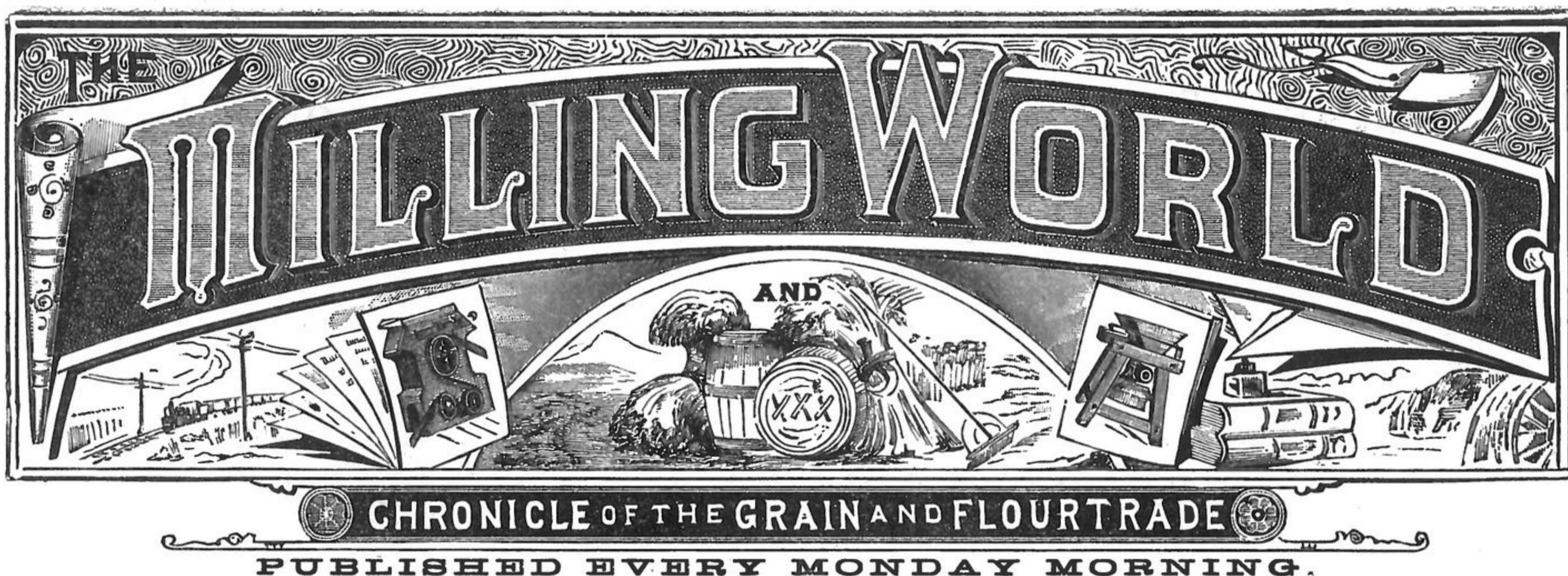
If you want a successful mill write us. Long System Mills remodeled on short notice. Case Short Break Corri ations put on any make of rolls. Our Roller Corn Mills are a most profitable investment. Now is the time to put one in your mill. Our Aspirator and Purifier for Corn Meal will astonish you. Belting, Gearing, Elevator Supplies, Silk and Wire Cloths shipped promptly on receipt of order. If you want mill supplies of any kind write us. Estimates on mills of any desired capacity furnished on short notice. Write us at once and state the capacity wanted and number of grades of flour you wish to make. The Automatic Feed on our machines makes them superior to all others. Catalogues and Circulars Mailed on Application.

RE-DRESSING ANY MAKE OF ROLLS PROMPTLY A SPECIALTY.

# THE CASE MANUFG. CO., COLUMBUS, OHIO.

PLEASE MENTION "THE MILLING WORLD"





VOL. XIX. No. 20.

BUFFALO, N. Y., JANUARY 14, 1889.

\$1.50 PER YEAR.

EDITOR RANCK, of our esteemed cotemporary, "The Millstone," is prominently mentioned as a candidate for the Indianapolis postmastership. No better choice could be made, and we hope to see Brother Ranck duly installed. He would be a first-class postmaster.

WHAT has become of Secretary Seamans? It seems a dog's age since he last pranced into the arena. Is it not time for the re-appearance of the amiable secretary? We hope that Milwaukee banquet did not create a vacancy in the secretaryship of the Millers' National Association.

ACCORDING to a compilation published January 1 by our esteemed southern cotemporary, the Chattanooga, Tenn., "Tradesman," the number of flour and grist mills started in the South during 1888 was 103, including 10 in Alabama, 1 in Arkansas, 1 in Florida, 6 in Georgia, 15 in Kentucky, 1 in Mississippi, 5 in North Carolina, 4 in South Carolina, 27 in Tennessee, 22 in Texas, 9 in Virginia and 2 in West Virginia.

WELL, has any one seen any appreciable effect of the late Milwaukee banquet on the prices of wheat or flour? The managers of that delightful feast should have invited "Old Hutch," of Chicago, to participate. That ancient individual would probably have talked less "fluidly" than did several of the orators in the convention, but he could have given those present a heap of mighty interesting information concerning practical methods of raising or lowering the price of grain, flour and other commodities. But what a banquet it was!

OUR esteemed St. Louis cotemporary, "The Milling Sphere," has been rather unlucky recently, having lost the prepared copy and valuable manuscripts for one issue at a fire in Editor Tatlow's home at Hannibal, Mo., and on a second occasion having been burned and flooded out in the fire that destroyed the Nixon-Jones printing establishment in St. Louis. Messrs. Donan and Company announce that the "Sphere" will appear in January in the best shape possible under the circumstances. We hope to see our neighbors on their feet again and wish them success unlimited.

MINNEAPOLIS during the year 1888 managed to exhibit a good degree of "supremacy as a milling center." The output of that city during the year was about 7,037,000 barrels, against 6,574,000 in 1887 and 6,168,000 in 1886. In 1888 Minneapolis exported 2,157,290 barrels, against 2,689,500 in 1887 and 2,633,000 in 1886. The exportation of flour from the United States in 1888 was about 9,205,000 barrels. In 1887 it was 11,518,449, and in 1886 it was 8,180,000. If any other town can show more "supremacy" per capita than Minneapolis, let it be known, so that Minneapolis may forward the "scepter" to the new monarch.

THE British and Irish Millers' Association differs in some respects from the American Millers' Association. The former certainly has a list of members; the latter probably has. The former publishes its membership roll in full; the latter

suppresses its roll of members. Why does not the American association show its hand? By being perfectly frank and above-board it might put itself into shape to attract members. No advice is offered herewith. The men who mismanage the American organization do not seem to know what a "national" association is or should be like, and they do not seem to care to find out, but they do seem content to parade under a grotesquely misapplied name.

THE grain bears took the first innings at wheat in New York and Chicago on the first business day of 1889. What are their prospects for the next six months? Can they keep wheat down anywhere near the present notch? It will be surprising if they do. All the conditions point to the certainty of a steady rise in the price of wheat from this time until May. The export demand seems likely to increase. Our own millers in many places are unable to get wheat enough to keep their mills going. Accumulated stocks in the Northwest are not large. If the bulls fail to get in their work, it will be because they do not know how to trim their sails to make the best of the gales that favor them.

THOSE correspondents who are inquiring about the so-called milling or flour-dealing "trust" and its relation to the Millers' National Association are merely wasting their time. THE MILLING WORLD has no list of the members of the association, nor does it believe that any other milling journal has such a list. No "trust" has been formed or contemplated. We do not see how a "trust" that has been neither formed nor contemplated can have any relation whatever to an organization like the Millers' National Association. Those millers who are inquiring about the "trust" and the association are on a wild-goose chase. The tail can not wag the dog. A hundred millers can not control 20,000 millers. Don't worry about "trusts."

EXPENSIVE elaboration and over-elaboration of milling processes are acknowledged in Great Britain to-day. American millers are perfectly familiar with the theory that milling has been elaborated too far, and they are familiar with those attempts to relieve it of some of its expensive burdens that are called "short systems of milling," but it is quite surprising to see the conservative Britons adopting an idea that is only a few years old. Here is a prominent English journal, commenting on the proposed "flour trust" in England, asking this question: "Are the millers perfectly satisfied with their new roller plant and its work? Is it not pretty certain that a newer, less intricate and equally costly plant will shortly have to be introduced? The resources of science are not exhausted, and it is upon the carpet that some new method of milling may be introduced." Is Great Britain to have a "short-system" fever? What is the "newer, less intricate and equally costly plant" that may be introduced? Is it a wholesale return to buhrs? Is it "cyclone" pulverizing? Or is it our old-time Yankee fad of "pneumatic grinding"? A "milling revolution" originating in England would be a rarity. It would be worth waiting for.



# The Canton Cabinet Filing Case Company, Canton, Ohio,

MANUFACTURERS OF

## The New Buckeye Document Case & Letter File; Also All Kinds Office Furniture



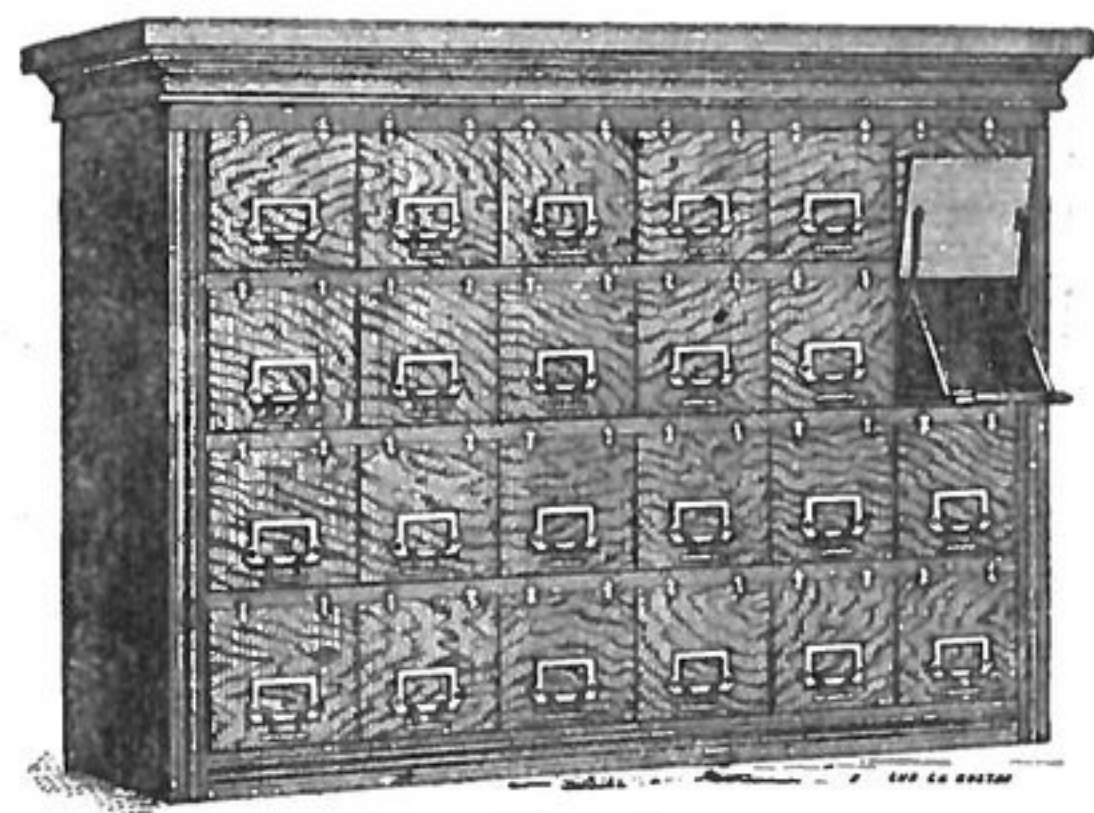
NO. 8.

**NO. 8** Represents one side of one of our Revolving Cabinet Letter Files and Document Cases Combined. It contains 30 Document Drawers and 8 Letter File Drawers. In filing letters we use first VOWEL of name on front of drawer, and LETTER FOLLOWING first VOWEL on Index Sheet within drawer. We also make more exhaustive systems which contain from 6 to 100 or more Filing Drawers.

**NO. 1** Represents one of our small Document Cabinets, for use on desks or brackets. Action of drawer can be seen in the cut. When front is raised inner drawer comes forward, exposing contents of drawer for inspection.

*Our Cabinet Files are Conceded to be the Most Convenient of Any in the Market. They are Compact, Simple, Complete, Durable and Ornamental.*

### SEND FOR PRICE LIST AND CATALOGUE.



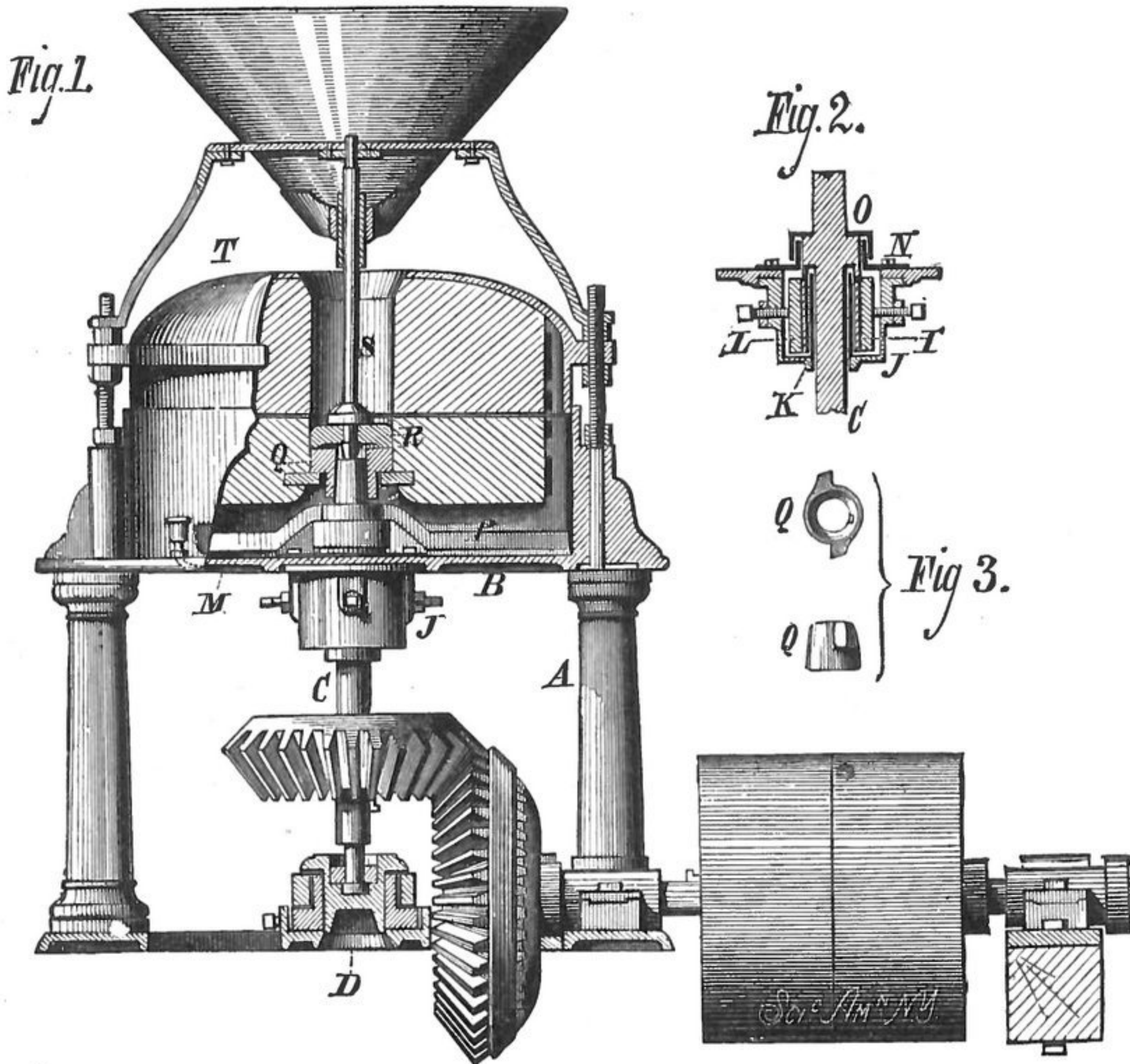
NO. 1.

# MUNSON'S PORTABLE MILLS

With all of the Latest Improvements. Indorsed by the Best Mechanical Experts and Engineers. Every mill warranted; Every mill fully inspected: Every mill placed on its merits; Satisfaction guaranteed. Thousands in use; Best of references given.

## IN USE BY THE LARGEST CORN GRINDERS IN THE WORLD.

MUNSON'S PATENT SPINDLE.  
MUNSON'S PATENT EYE.  
IMPROVED BUSH AND COLLAR,  
CURBS, SILENT FEEDERS, ETC. ETC.



DOUBLE GEARED WITH COUNTER-SHAFT,  
Tight and Loose Pulleys,  
BEVEL SHELL WHEEL & PINION.  
Write Us for Prices and Discounts.

## Munson Brothers, Utica, N. Y.

## C. H. BIRD & CO., KALAMAZOO, MICH.

MANUFACTURERS OF PATENT

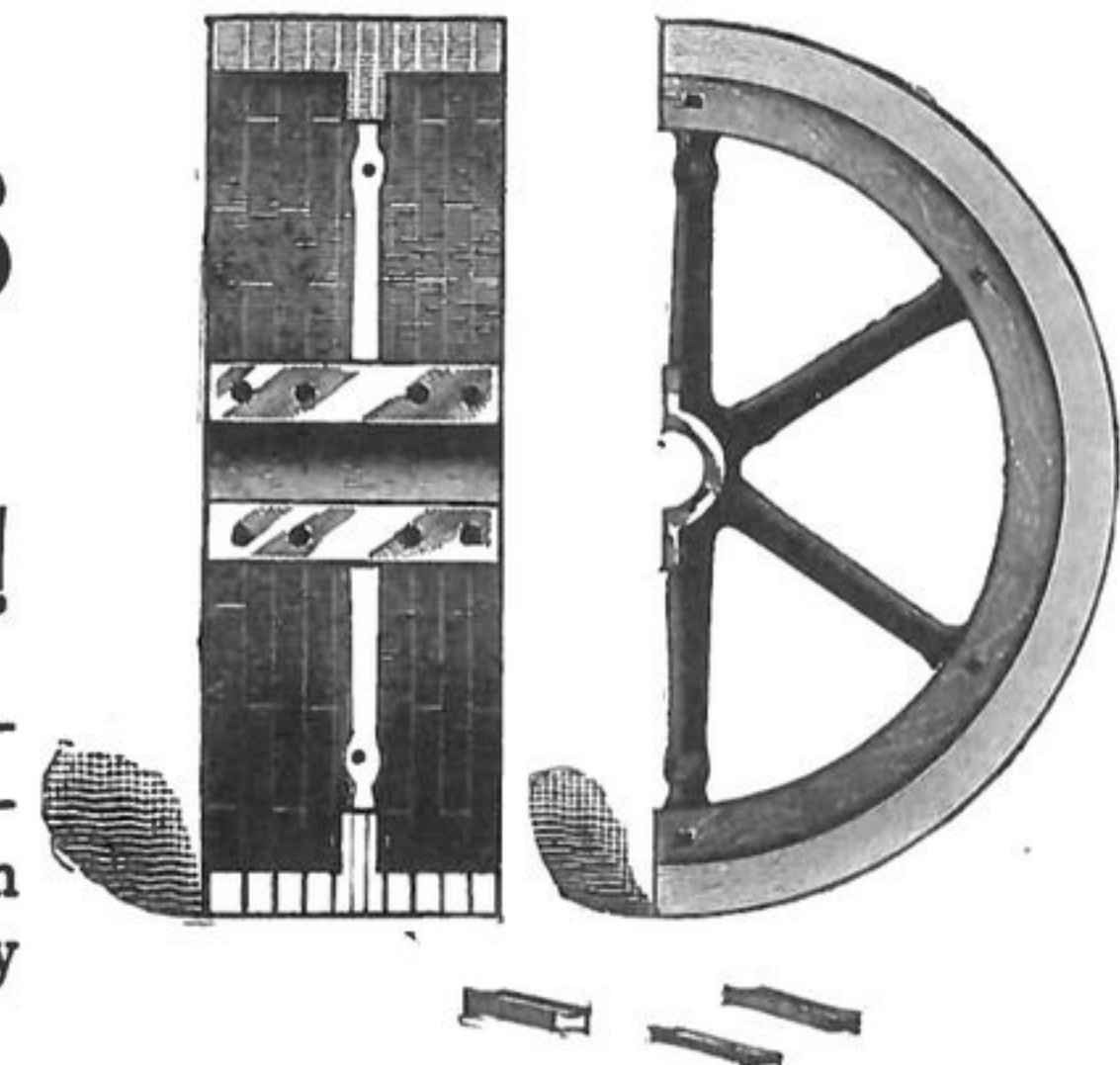
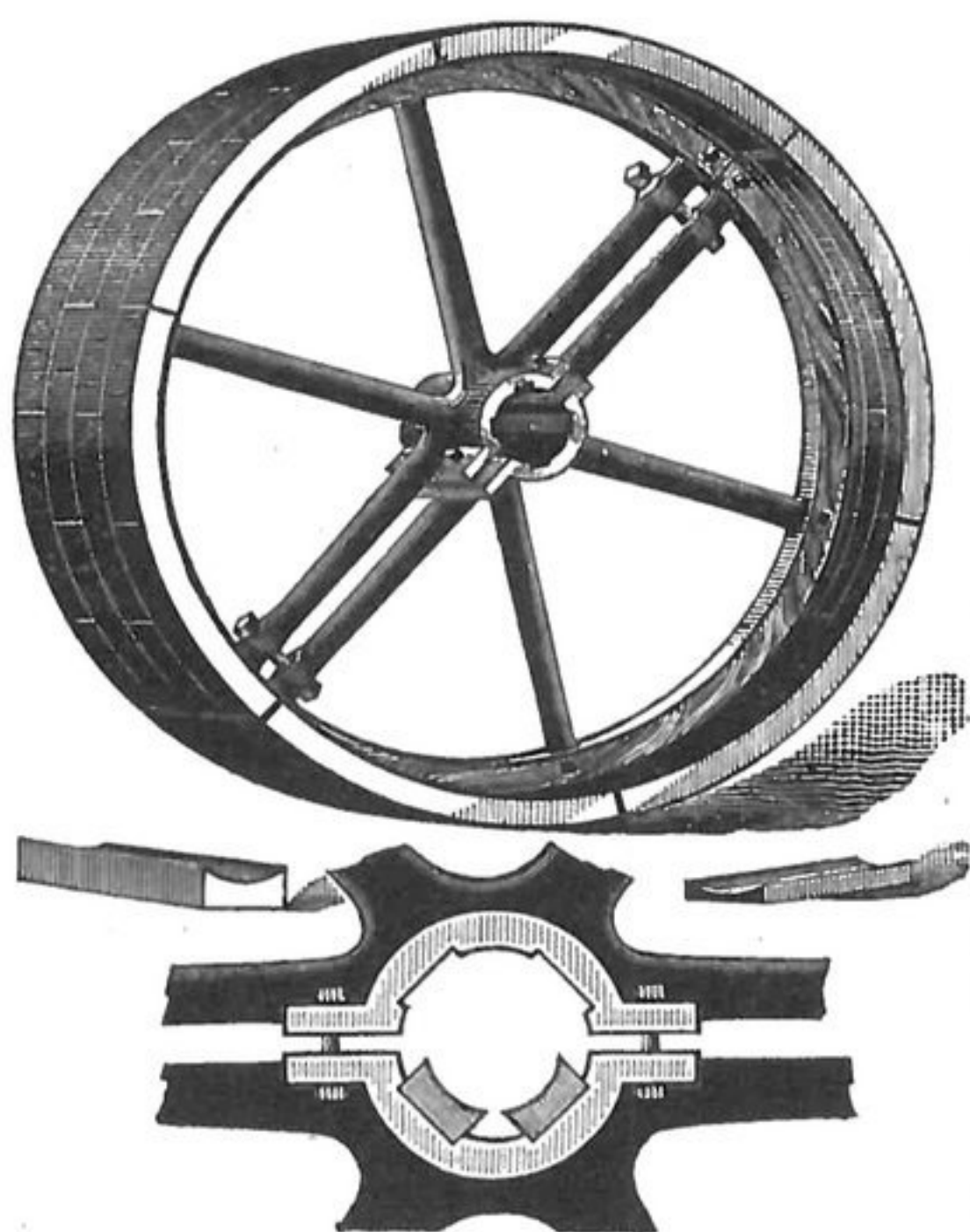
### Wood Split Pulleys

WOOD RIM WITH IRON ARMS.

### The Best Pulley on Earth!

Is very easily and quickly adjusted to Shaft. Has Patent Iron Bushings Interchangeable, to Fit Different Diameters of Shafts. Has FOUR or SIX Bearings on Shaft. This fastening never slips. Every Pulley strongly built and perfectly balanced.

### SEND FOR CATALOGUE AND PRICE LIST.







PUBLISHED EVERY MONDAY. OFFICES: { Corner Pearl and Seneca Streets,  
Over Bank of Attica.  
McFAUL & NOLAN, - - - PROPRIETORS.  
THOMAS MC FAUL. JAMES NOLAN.

**SUBSCRIPTION.**

In the United States and Canada, postage prepaid, \$1.50 Per Year, in advance; remit by Postal Order, Registered Letter, or New York Exchange. Currency in unregistered letter at sender's risk.  
To all Foreign Countries embraced in the General Postal Union, \$2.25 Per Year, in advance.  
Subscribers can have the mailing address of their paper changed as often as they desire. Send both old and new addresses. Those who fail to receive their papers promptly will please notify at once.

**ADVERTISING.**

Rates for ordinary advertising made known on application.  
Advertisements of Mills for Sale or to Rent; Partners, Help or Situation Wanted, or of a similar character One cent per word each insertion, or where four consecutive insertions are ordered at once, the charge will be Three cents per word. No advertisement taken for less than 25 cents. Cash must accompany all orders for advertisements of this class.  
Orders for new advertisements should reach this office on Friday morning, to insure immediate insertion. Changes for current advertisements should be sent so as to reach this office on Saturday morning.

**EDITOR'S ANNOUNCEMENTS.**

Correspondence is invited from millers and millwrights on any subject pertaining to any branch of milling or the grain and flour trades.  
Correspondents must give their full name and address, not necessarily for publication, but as a guarantee of good faith.  
This paper has no connection with a millfurnishing house and aims to represent the trade without prejudice, fear or favor.  
Address all communications

## THE MILLING WORLD,

BUFFALO, N. Y.

Entered at the Post Office, at Buffalo, N. Y., as mail matter of second-class.

**SITUATIONS WANTED.**

Advertisements under this head, 25 cents each insertion for 25 words, and 1 cent for each additional word. Cash with order. Four consecutive insertions will be given for the price of three.

**SITUATION WANTED.**

A steady miller would like to have a position as assistant in a roller or buhr mill. Has had 5 years experience in buhr milling. Address, HARRY H. VON NEIDA, 20 Laureilton, Pa.

**SPECIAL ADVERTISEMENTS.**

Advertisements of Mills for Sale or Rent, Partners Wanted, Machines for Sale or Exchange, etc., etc., cost 1 cent per word, for one insertion, or 3 cents per word for four insertions. No order taken for less than 25 cents for one insertion, or 50 cents for four insertions. Cash must accompany the order. When replies are ordered sent care of this office, 10 cents must be added to pay postage.

**FOR SALE AT A BARGAIN.**

A good 100-barrel roller mill in Western New York. Good reasons for selling. For particulars address, "E," care of MILLING WORLD, Buffalo, N. Y. 2825

**WANTED.**

Wanted to sell one-half or whole interest in a first-class paying grist and saw-mill, or would rent same. Every thing in first-class order. For particulars address, "P," care of THE MILLING WORLD, Buffalo, N. Y. 1619

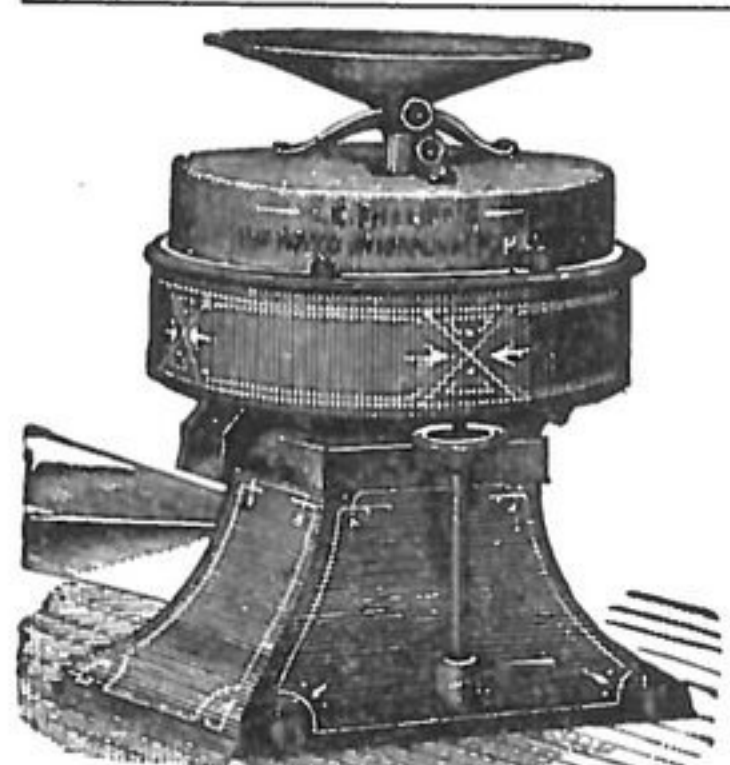
**SAFE BUSINESS INVESTMENT.**

A party owning flouring mill, with modern most approved machinery, doing large, profitable, local and merchant business, well established, located in growing city, population 12,000, Western New York, desires to associate more active capital. Correspondence solicited. Address, BOX 787, Waukesha, Wis. 181f

**FOR SALE.**

- 10 Single Sets 9x30 Stevens Rolls.
- 2 Single Sets 7x12 Ferriers Rolls.
- 2 Centrifugal Reels.
- 2 No. 8 Niagara Bran Dusters.
- 2 No. 8 Prinz Dust Collectors.
- 1 No. 4 Hunter Purifier.
- 1 No. 6 Garden City Purifier.
- 1 No. 1 Pyne Purifier.
- 1 No. 8 Richmond Brush Machine.
- 1 No. 2 Silver Creek Scourer.
- 1 No. 00 Becker Brush Machine, over 50 Run Millstones all sizes, all complete.

Above Machines are in first-class condition and practically as good as new. Address J. B. DUTTON, 115 E. Fort Street, Detroit. 181f



If you are desirous of obtaining the best Mill or Cob Crusher, send for our catalogue and be convinced that our's fill the bill. Can not fail to please you. They are guaranteed to prove as represented.

C. C. PHILLIPS,

OFFICE, 20 SOUTH BROAD STREET,  
PHILADELPHIA, PA.

**MILL MACHINERY FOR SALE.**

- One 24-Inch Portable Mill, wood frame, capacity 15 to 20 bushels per hour; new, best make.
- One 20-Inch Portable Mill, iron frame, capacity 12 to 16 bushels per hour; new, best make.
- One No. 0 Standard Combined Separator, Smutter and Brush Machine; new, best make.
- One 18-Inch Vertical Portable Mill, French Buhr Stone, hung on horizontal shaft; capacity 25 to 40 bushels per hour; new, best make.
- One 14-Inch Vertical Feed Mill; best make, new, a bargain.
- One No. 6 Dustless Separator; new, a bargain.
- Two No. 4 Scientific Grinding Mills, capacity 40 to 50 bushels per hour; new.
- A Lot of Elevator Buckets, brand new, best make, any size desired, very cheap.
- One No. 1 Full Rigged Combined Dustless Separator; new, a bargain.
- Four Corn Cob Crushers, right or left hand, driven from above or below, best make; capacity 40 to 60 bushels per hour.

For particulars address, FRANK SMITH, care of THE MILLING WORLD, Buffalo, N. Y. 5tf

**AGENTS WANTED.**

Active resident agents wanted in every locality, rare offer, not whole time required, money made easily. Samples, &c., free. Send reference with application. RELIANCE OIL & GREASE CO., Cleveland, O. 1922

HAS the Minneapolis blizzard recently run foul of the Jackson man? Or did the Geo. T. Smith Middlings Purifier "clean out" the Minneapolis amateurs in one round? Time!

It is reported that 300 firms, representing over 300 mills, with about 88,000 barrels daily capacity, running on winter wheat have agreed to run on half time during January. If they stick, the effect ought to be apparent at once.

UNDER new management, our esteemed cotemporary, the Baltimore "Journal of Commerce," comes out in new and greatly improved form and filled from corner to corner with valuable statistics relating to the grain and flour trades. It is evidently the intention of the publishers to push the "Journal" to the front. Success to them.

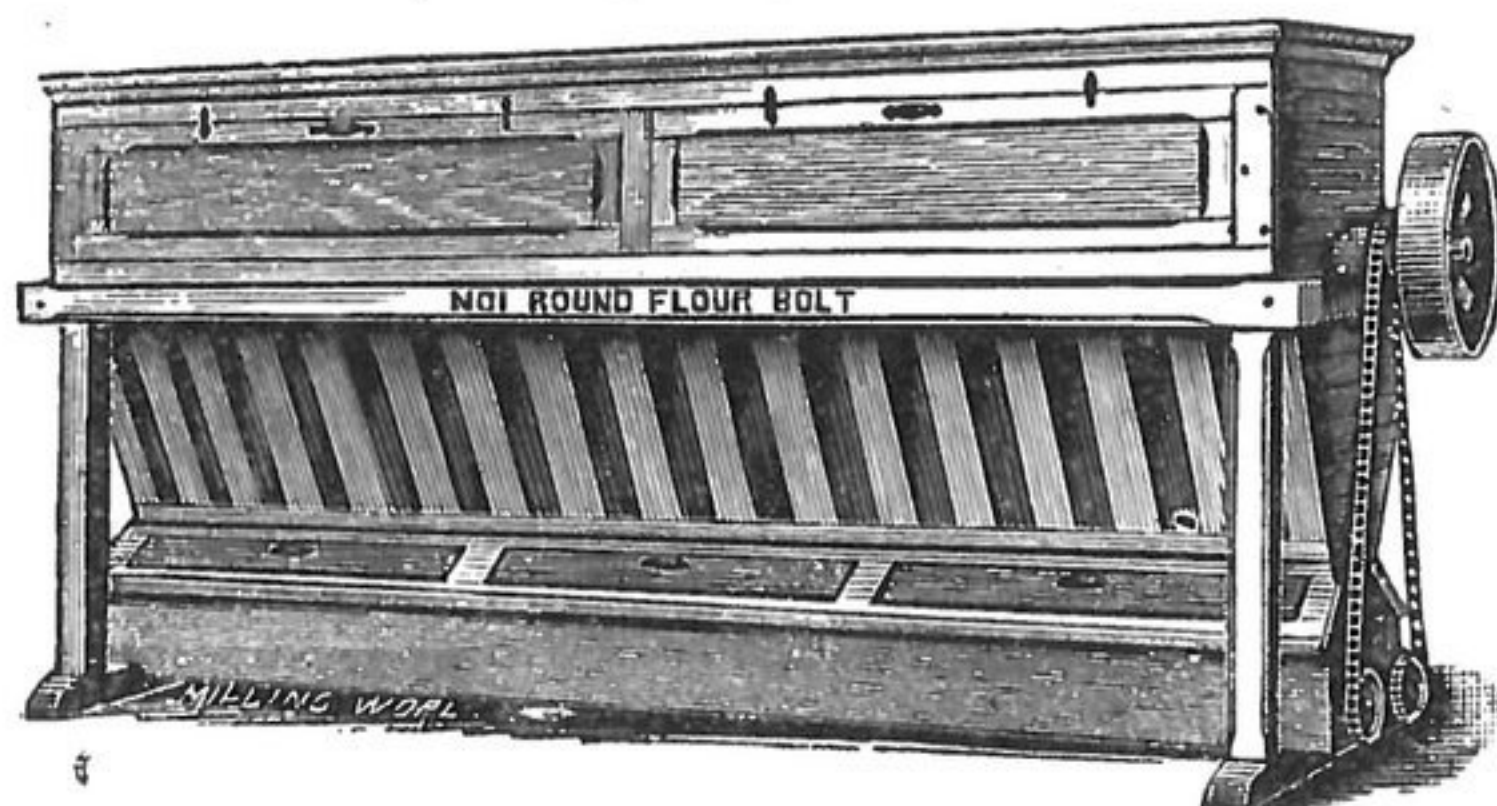
DURING December, 1888, the fire-losses in the United States and Canada aggregated about \$9,700,000, against \$10,308,000 in 1887, and \$11,200,000 in 1886. The flour and grain industry contributed \$405,000 to the December total. The year 1888 gave a fire-loss of \$123,300,000, against \$129,265,000 in 1887 and \$116,600,000 in 1886. In 1885 the total was \$94,200,000 and in 1884 it was \$112,000,000.

THOSE British enthusiasts, who have for several years been asserting that India and Australia would in 1888 make Great Britain entirely independent of the United States for a wheat supply, must be somewhat discouraged over the present situation in those two countries. Late reports from Europe indicate that, owing to severe drouths in the Punjab and the Central Provinces, the crop of wheat in India that is to be harvested next March will probably be very short, too short to make up the deficiency in the crop of March, 1888. Should these forecasts be realized, even the small exportation of wheat from India in 1888 will not be repeated in 1889. It is possible that "the great Indian wheat country, with its practically limitless capacity," may not be able to send a single cargo of wheat to Great Britain during 1889. It would be a godsend to the British farmer if that were the result of the present crop. Meanwhile, that other "great and illimitable wheat area," Australia, from which so much has been promised, not only is unable to export wheat to Great Britain, but is really importing both wheat grain and wheat flour from the United States! One ship, the "Josephus," recently sailed from San Francisco, California, for Sydney, Australia, carrying in her cargo 6,825 barrels of flour, 19,000 bushels of wheat and 46,000 bushels of oats. Now let Russia have one or two average or poor crops, instead of her last two large ones, and the wheat and flour situation will once more be changed entirely in Great Britain and the United States. Manitoba was also counted on to displace a large portion of American wheat in Great Britain, but Manitoba suffered terribly in August last from frost and rust, and her wheat is labeled "none" on the Glasgow, London and Liverpool corn quotations. Evidently the British desire to be freed from dependence on the United States is not yet near enough to realization to comfort the British.



**FLOUR BOLT AND ROLLING SCREEN.**

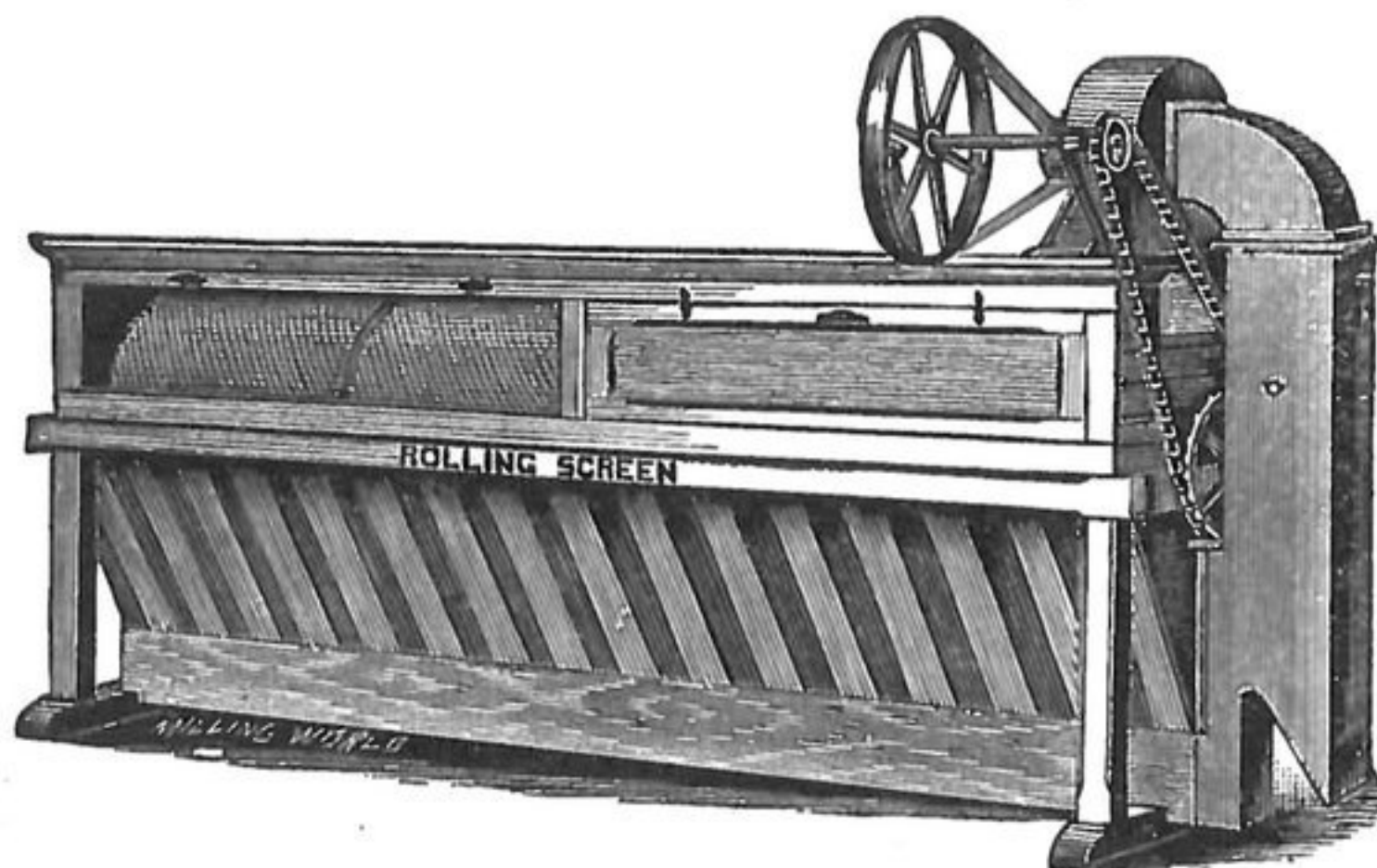
Herewith are two engravings illustrating specialties made by that well-known house of Jackson, Mich., The John Hutchison Manufacturing Company. The first engraving shows their new No. 1 round flour-bolt, which they claim to be the latest and best slow-running reel on the market. It does the clearest work, makes the most accurate separations and has a larger capacity than a six-sided reel of twice the length. It does not scour the undesirable portions of the stock at all. In this reel the wear on the silk is less than with any other device, and the makers assert that it will bolt whiter and run with one-third the power and handle as great a quantity of all kinds of stock as the best of centrifugals. It is neatly designed and is built in a first-class



No 1. ROUND FLOUR BOLT.

manner throughout. It is simple and durable. It has a motion of only 28 revolutions per minute. It has two conveyors side by side. The cut-off arrangements are very simple and the machine can be easily taken apart and set up.

The second engraving shows their new rolling-screen, with fan attachment. In this screen the air is taken in at the end opposite to the separating trunk and fan, securing a complete air draft on all the wheat alike. The wind-trunk performs the same duty as on any other cleaner. The amount of scouring surface is double that in other machines. The reel is run just fast enough not to carry the wheat over and to let it run back on the wire-cloth, causing the wheat to be scoured thoroughly by friction against the wire and on



THE HUTCHISON NEW ROLLING SCREEN.

itself. The reel is 30 inches in diameter and 8 feet long. It is round. The wire-cloth is placed on the outside of the spiders. A conveyor placed under the machine is driven by sprocket and chain. This reel is built in a substantial manner, being finished to make as fine an appearance as any centrifugal reel. The John Hutchison Manufacturing Company will send this machine on 30-day trial to all responsible parties. Address them for full information.

**PRODUCERS, TRUSTS AND CONSUMERS.**

A. B. SALOM.

Agitation of the question of trusts, monopolies and all forms of business combinations goes on unabated among the unthinking and the ill-thinking. Much that is uttered by the agitators is true, but far more that they utter is untrue. Much that they propose as a remedy is good, but far more that they propose is bad, insane, impossible, undesirable. In the past few months the orators, the writers and the disputants who are discussing the subject of trusts have visibly split into two distinct schools. The first of these schools includes probably the larger number of those who devote attention to the subject. They are the

men who see one way only. They start out with the proposition that all large aggregations of capital are a menace to the general good and that the government should control their operations. They acknowledge no justice in any argument that would seem to allow to men of large wealth and wide experience the same degree of liberty that is allowed without question to the men of small wealth and narrow experience. This school naturally includes all the reckless demagogues. The other school is composed of men who can think clearly and who are capable of acting without prejudice. They are men who have learned something since they began to investigate the subject, and they are too honest as well as too intelligent to follow a ridiculous hobby to a foolish ending when they have seen their error.

The modern community may be considered divided into two classes, producers and consumers. The so-called middlemen may belong partly to one and partly to the other of these two great classes. Now, in the treatment of the trust question, fairness demands that the rights of both producers and consumers should be regarded, but the rabid, fanatic, senseless anti-trust agitators refuse to admit that the producers have any rights worth consideration for a moment. They bestow all their spurious, furious, injurious philanthropy upon the consumers and all their hostility upon the producers, portraying the producers as remorseless, rapacious demons, and the consumers as their hopeless victims. Under the disreputable name "trust" they class all large aggregations of capital and experience, and they catalogue their crimes as follows: 1. Trusts foster monopolies and force men of small means out of business. 2. Trusts, by destroying competition, make large profits and inequitable prices. 3. Trusts enable men to make large fortunes out of consumers by charging large prices. 4. Trusts build up rings of wealthy men who control legislation in their own interest and against the interest of the public at large. 5. Trusts endanger personal and political freedom. 6. Trusts undermine republican institutions. Of course the fanatics who formulate this indictment believe, or pretend to believe, every count in it, but the intelligent citizen, who is neither prejudiced beyond conviction nor frightened by aerial bugaboos of the nursery stripe, may profitably analyze the counts and determine to what degree they are true or false.

Consumers are interested in producers in one leading particular, and that is the price of the ware produced. If so-called monopolies can produce the ware more cheaply than the small producer can, the consumer will favor the monopoly above the small producer. Monopoly, in the strict meaning of the term, does not exist in this country. No trust or number of trusts can force out of business the small capitalist who can and does produce a given ware as well and as cheaply as the trust produces it. That count in the indictment fails because it is false. The claim that trusts make larger relative profits than individual producers is equally untenable. The small producers compete with one another and keep down prices, and when small producers pool their means and form trusts, or larger producers, they find other larger producers with whom they are compelled to compete. The claim that large producers charge increased prices for wares is the crucial count in the indictment, and to that count especial attention is invited. If it be provable, then all that is said against trusts is excusable. If, on the contrary, large aggregations of capital and experience have resulted in positive benefit to the public by the enormous cheapening of wares, then most of what is said against trusts is wrong. Take, for instance, the cotton industry of the United States. The census reports of 1830 and 1880 show some very interesting things that have resulted from the employment of large aggregates of capital in that industry, as the following statistical table proves:

	1830.	1880.
Number of establishments.....	801	756
Aggregate capital invested.....	\$40,612,984	\$208,280,346
Number of pounds cloth produced.....	59,514,926	607,264,241
Number of persons employed.....	62,208	172,544
Number of spindles employed.....	1,246,703	10,653,435
Amount of capital to establishment.....	\$50,702	\$275,503
Ratio of pounds produced to capital.....	1.4 to \$1.00	2.4 to \$1.00
Ratio of capital to persons employed.....	\$652.85 to 1	\$1207.17 to 1



Ratio of spindles to persons employed.....	22 to 1	62 to 1
Ratio of capital to spindles employed.....	\$32.58 to 1	\$19.55 to 1
Ratio of pounds produced to persons employed	950.7 to 1	3519.5 to 1
Ratio of pounds produced to spindles.....	47.6 to 1	57.0 to 1
Annual consumption of pounds of cotton cloth per capita.....	5.90	13.61
Price of cotton cloth per yard.....	17cts.	7cts.
Operative's wages per week.....	\$2.55	\$5.40

Difficult and even impossible would it be to make those figures show that the trusts or monopolies have wrought great damage to the public by employing larger amounts of capital in the cotton industry. Take as another instance that much and well and justly abused corporation, the Standard Oil Company. Its sins, both of omission and commission, have been great, but what of its effects upon prices to consumers? The following abstract from the records of that company will answer:

Year.	Shipments from wells, barrels.	Stock of crude oil on hand, barrels.	Price of crude oil at wells, gal.	Price per gal. of ref. oil for export.
1871	5,667,891	568,858	10.52 cts.	24.24 cts.
1872	5,899,942	1,174,000	9.43	23.75
1873	9,499,775	1,625,157	4.12	18.21
1874	8,821,500	3,705,639	2.81	13.09
1875	8,924,938	2,751,758	2.96	12.99
1876	9,583,949	1,026,735	5.99	19.12
1877	12,496,644	2,857,098	5.68	15.92
1878	13,750,090	4,307,590	2.76	10.87
1879	16,226,586	8,094,496	2.09	8.08
1880	15,839,020	16,606,344	2.24	9.12
1881	19,340,021	25,333,411	2.30	8.05
1882	22,094,209	34,335,174	1.87	7.41
1883	21,967,636	35,715,565	2.52	8.14
1884	24,053,902	36,872,892	1.99	8.28
1885	24,029,424	33,836,939	2.11	7.86
1886	26,332,445	33,395,885	1.69	7.07
1887	26,627,191	28,310,282	1.59	6.75

Only large capital wisely applied could have reduced the cost of crude and refined petroleum so greatly. The fanatic, who labels all rich men thieves and styles all large companies robbers and pirates, would find it difficult to satisfy an intelligent and inquiring consumer that even the Standard Oil Company has not been a benefit to the public. Left to small capitalists or forbidden by law to large combinations of capital, the petroleum interest would to-day lack the pipe-lines and the refining processes that have cheapened that product so greatly, and the consumer would still be paying large prices instead of the low prices made possible by the "Oil Barons" and "Oil Robbers," as they are so fluently called by the very men who are most directly and most largely benefited by their enterprise. Similarly the Cottonseed Oil Trust reduced the price of yellow oil from 47.08 cents per gallon in 1883 to 38.83 cents in 1887. The abused Sugar Trust reduced the price of "Standard A white sugar" from \$9.48 per barrel to \$5.66, with other grades of sugar and molasses in a similar ratio. The infamous "Railroad Robbers," so abused by the windy agitators, have kept pace with the other "corporate capitalistic thieves" in cheapening for the benefit of the public. At the expense of these soulless and conscienceless scoundrels the robbed and defrauded public is enabled to save 51 per cent. in railroad transportation in 1888 as compared with 1862, as will be seen in the following figures showing the cost of sending 100 pounds of freight by rail from New York to Chicago.

	1862.	1888.		1862.	1888.
First class.....	\$1.63	\$0.75	Third class.....	\$1.05	\$0.50
Second class.....	1.32	.65	Fourth class.....	\$0.66	35

Another soulless combination of brains and capital, the Western Union Telegraph Company, has succeeded in robbing the public by cheapening telegraphic communication 85 per cent. while increasing its efficiency a hundred-fold. The figures from the company's books are as follows:

#### RATES FOR SENDING TEN WORDS FROM NEW YORK.

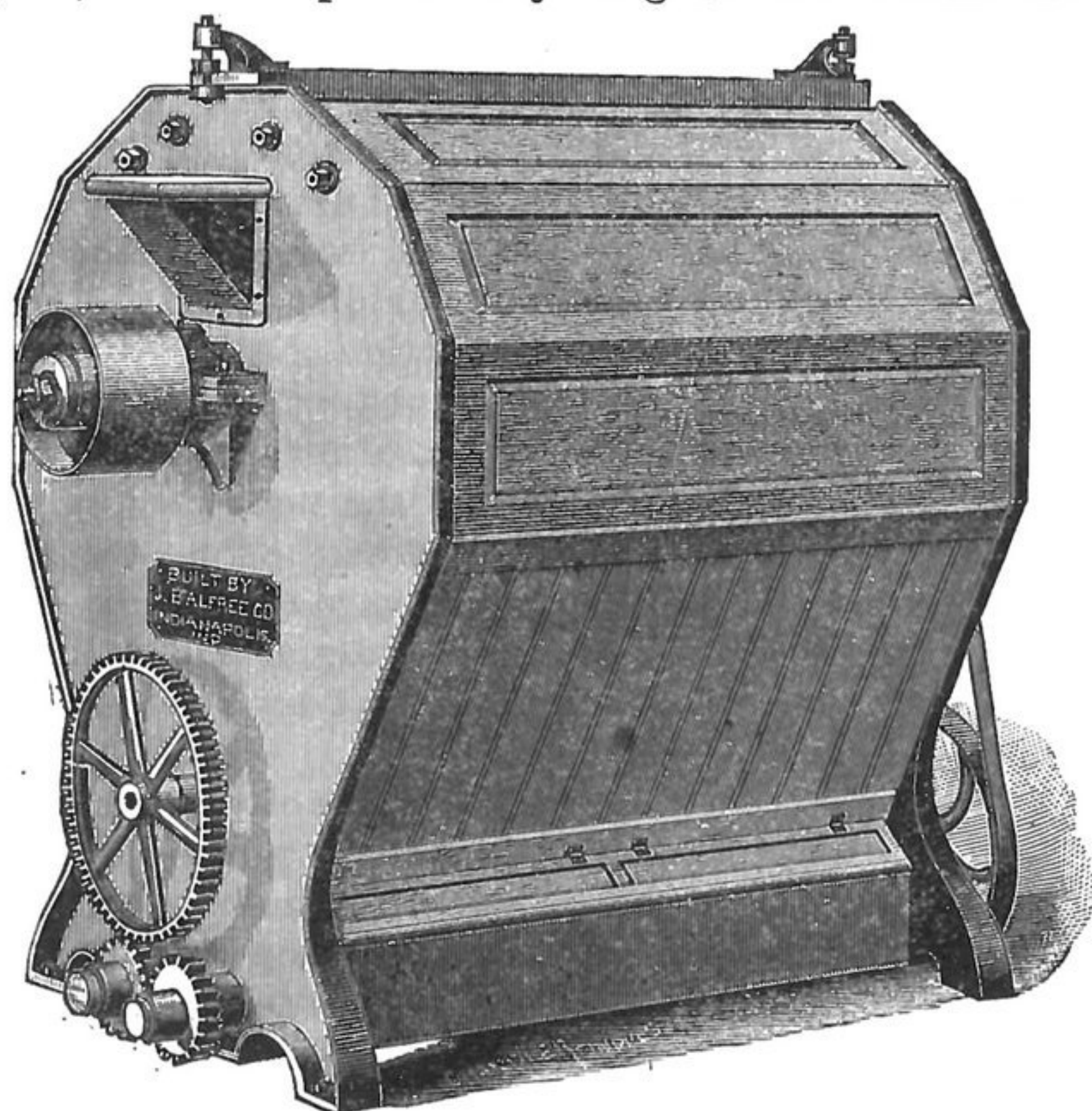
	1866.	1888.		1866.	1888.
To Chicago.....	\$2.30	\$0.40	To Minneapolis....	\$2.10	\$0.60
To St. Louis.....	2.55	40	To Buffalo.....	75	25
To St. Paul.....	2.25	50	To Wash'n D. C..	75	25
To Cincinnati.....	1.99	40	To San Francisco.	7.45	1.00
To New Orleans...	3.25	60	To Oregon.....	10.20	1.00
To Galveston.....	5.50	75	To W. Territory...	12.00	1.00

Thus, on the crucial point of cheapness of service or produce, the indictment against the trusts fails. History is against it. Facts are against it. The other charges against trusts, that the capitalists may control legislation, that trusts endanger personal or political freedom and that they undermine republican institutions, would not be easy to prove. If there are instances of corruption since the genesis

of trusts, they can be matched with similar instances in days when trusts were unknown. If personal or political freedom is endangered by a few wealthy men, the many millions of poor men have in their hands the power of revolution, against which no system of finance, politics, government or society can stand. If republican institutions are undermined by the cheapening of all kinds of produce and service, the descendants of the men who built those institutions will be able to rebuild them whenever a crash comes. Sentimental and untenable theorizing and false assertion will not remove any of the evils, real or fancied, predicted or accomplished, that may grow out of large combinations of capital. Governmental authority exercised over private business matters, whether large or small, would mean the extinction of self-government among free men. As American citizens are free from government surveillance, so must American capital be free. Up to date the consumer in the United States has been benefited incalculably, not hurt, by the much-abused trusts. When the average American citizen is no longer able to see that he is being robbed, defrauded and annihilated by the producers of his country, it will be time for him to turn for redress and consolation to those fanatics from other lands who never produced any thing but wind. Let trusts be investigated, by all means. The investigation will be the shortest, surest, safest, cheapest and most satisfactory method of enlightening the public concerning the achievements of the great combinations of capital that play so conspicuous a part in the development of the United States.

#### THE "CLIMAX" BRAN DUSTER.

A perfectly satisfactory bran-duster is one thing that no miller can afford to lack. Such a machine is the "Climax" bran-duster, shown in the accompanying engraving. It is made by the well-known J. B. Allfree Company, of Indianapolis, Ind. It is particularly designed to overcome the ob-



THE "CLIMAX" BRAN-DUSTER.

jections usually made to machines of this class. It is so constructed that either one or both ends of the brushes may be expanded from outside the machine. The advantage of this arrangement will be appreciated on account of the more rapid wear of the head-ends of the brushes. The large diameter of the machine gives great extent of cloth-surface. On the top of the machine is an adjustable brush which can be brought down to engage with the revolving brushes. This brings the material in contact with brush surface on both sides and insures better and cleaner work. By its peculiar construction the heavier material is retained longer than the lighter, which makes a decided improvement in the color of the flour. Perfect control is secured by the use of a cut-off conveyor. Only the best material is used and the construction is the best possible. Owing to this and its extreme simplicity, the entire machine, with the exception of the wire and brushes, will last a lifetime.



## JONATHAN M. ON J. MURRAY C.

Writing in answer to some strictures by Mr. J. Murray Case on Mr. Jonathan Mr. Mills' ideas on bolting, the latter gentleman says in the "American Miller": "Now, my dear Mr. Case, we will proceed to show that what you assume to know in your article about bolting is not either astute, discerning or discriminating, or you never would have made such a mistake as you have in undertaking to disprove the facts I laid down in my article on sieve bolting. You quote me as saying that the flour rises to the top, while the middlings and coarse material all go to the bottom on a shaking sieve. This, you say, brother Jonathan certainly knows or should know is not correct if he has ever made any experiments upon a shaking sieve, which you say he unquestionably has. You can wager your last cent I have, and stand square by my statement as above quoted. You quote the old adage: 'Drive a wagon load of potatoes over a rough road, and all the big potatoes will come to the top.' How misapplied the argument, and I wonder who did not know that fact? But would big or little potatoes all or any of them rise to the top of a wagon-load of feathers, Mr. Case? Can you take a pound of coarse shot and put it in a basin of water or flour and by any occult legerdemain manipulate them to come to the top? Can you take a pound of flour and put it in a hand or vibratory sieve, and pour on top of said flour a pound of coarse and fine middlings, and make them stay on top of said flour by vibrating the sieve? I say no, you can not; and if you had given the subject practical instead of theoretical attention you never would have rushed into print with such a misstatement of facts.

"About every first-class miller has a set of hand-sieves about his mill, and can in ten minutes prove that I am correct and you are wrong. I said nothing about scalping sieves in my article. I was treating on the sieve as a flour-bolt. You say, 'The matter of middlings riding upon the particles of bran can readily be overcome by a great number of mechanical devices,' thereby admitting that the evil exists. I said nothing about the middlings riding on the particles of bran. What I did say is that 'the stock will not have traveled two feet toward the tail until all the coarse, sharp, heavy middlings have settled down next to the cloth and the flour is riding on top of the middlings and is assisted in remaining on top through the action of the continuous, quick action of the sieve dropping out down from under the stock on the sieve, and as the stock also falls slightly, the air holds the finest and lightest of the flour on top, with whatever impurities that are as light as the flour to ride on in peaceful ignorance of the sieve toward and finally off at the tail of the sieve with the coarse material that would not pass through the cloth.' Please do not try to mislead by quoting something I did not say.

"Among the devices you name is a series of wires stretched across the cloth at intermediate spaces of a few inches. If you will go to Oxford, Mich., you will find a set of hand sieves in the 'Craig Mill' there that I have owned for a number of years, and I presented them to Mr. Craig. One of these sieves, clothed with No. 14 cloth, has a number of fine wires stretched across the cloth at various distances from the cloth. I thought to force the middlings from settling on the cloth and give the flour a chance. But alas, it was a delusion. Give something new and practical, Mr. Case. You say 'Another is to cause a vertical movement of the material.' Mr. Andrew Hunter uses this vertical movement in operating his break-scalper and is entitled to his device for producing that quick jarring effect, though he may not be able to procure a Government lock on it in the shape of a patent. That movement can not be successfully produced by a crank or ordinary eccentric movement. Mr. Case says, 'I might mention many others that would overcome that riding of the floury material upon the particles of bran.' Now, if Mr. Case is no more prolific in these 'many other' methods than he has been in the ones he has named, the evil will remain just as I say it exists for some one else to solve. Mr. Case, it appears, was not so much interested in my treatment of the sieve as he was in my treatment of the inter-elevator bolt, and at once sails in on his 'vertical col-

umn' theory and swings in a couple of cuts, one of his inter-overshot style of reels, and another cut misrepresenting my universal flour-dresser. In his description of my reel he says: 'There must necessarily be a considerable amount of space between the zigzag cylinder and the cloth, not less than two inches, consequently there is a vertical column of material two inches thick from the bottom of the reel up to a point above the center.'

"I guess Mr. Case has never examined the action of material in a Mill's Reel. If he has, his observations have been so superficial that he failed to note the action of the rapid turning over of the material as it was carried up and lapped over onto the fluted cylinder, and he has forgotten that the reel is rotating at a speed greater than the slide-back of the material. Neither has he learned that a column of pure flour one inch square and two inches deep weighs but one-half ounce. Neither has he probably learned that a half-ounce of flour cast off of his overshot machine onto the down-traveling cloth strikes the cloth with a force equal to four ounces of flour, or equal to the weight of a column of flour eight inches deep and one inch square, thereby making his overshot one of the most pernicious slammers of impurities through the cloth ever devised. He also has overlooked the vital fact that the vertical column of his overshot misnomer of a bolt does not nor can not slide down the cloth on the down-traveling side, for the reason that the cloth is traveling at a speed equal to the velocity imparted to the stock cast off of his overshot blades. He is so blindly prejudiced in his criticisms to protect a false theory, because it is embodied in a machine that he makes, that he can not see that the vertical column on the up-traveling side of the cloth balances back against the vertical column constantly being built up by the discharge of the stock from the overshot blades on the down-traveling side of the cloth. The plain facts in the case are precisely as I have shown them to exist, and no amount of argument can change these facts. I don't say such an overshot trap will not force a large quantity of flour and impurities through the cloth at the point of impact on the cloth of the discharged stock from the overshot blades; but the balance of the way around the reel the stock lies as dead as Mr. Case's theories are untenable."

## THE EXPLOSION OF FINE DUST.

An explosion in an oatmeal mill at Chicago recently has called forth an explanation of the phenomena of dust explosions, which is as follows: Combustion is the chemical union of oxygen with a combustible, and all substances are combustible which so unite with oxygen, whether by rapid burning or by slow oxidation, both modes of union being forms of combustion. Ordinarily the oxygen for combustion is obtained from the air, but wherever found free it will unite under favorable conditions with a combustible. Combustibles include not only substances containing carbon or hydrogen, or both, as wood, grain and oils, but also several of the metals. The most favorable condition for combustion is that giving freest access to air or pure oxygen sufficiently heated to start the action, and hence in the condition of diffused dust. In this state even iron will not only burn in the air, but it may be made to explode. Explosion is the sudden expansion of a burning body and of the heated air about it, by which the whole momentarily demands more room. Those are the chemical laws which relate to explosion. The facts are: All combustibles explode if in sufficiently fine powder they are suddenly fired while diffused in air. This includes many bodies not otherwise explosive, as rosin, wood, coal, the grains and even iron and some other metals. Demonstration: Close an ordinary tin cup with a perforated cover filled with small holes; fix a lighted candle in the center of the top; have a small tube, one-fourth of an inch in diameter, pass through the side of the cup near the top and sloping downward within to near the bottom. On the bottom of the cup have a layer of powdered resin. Then blow a sudden puff of air from the mouth through the tube and so drive a small cloud of the powder through the perforations into the air around the burning candle. A harmless explosion in the air will



instantly follow, producing a flash of theater lightning. Finely powdered wood, impalpable, grain and similar bodies may be exploded in the same way. And by proper modifications of the apparatus finely powdered iron or other combustible metals may be made to explode. There is no "explosive gas" about any of these bodies until developed by combustion; and none of these combustibles will explode when not diffused in the air. They simply burn without explosion. But all combustible bodies floating as a fine powder in the air are liable to explode.

#### POINTS IN MILLING.

ONE of the most potent, most incessant causes of loss in mills is the abuse of machinery. It is often the case that use has less to do with making machinery useless than abuse. Even in large mills, where the employes have stated work to perform and are able to give their entire time and care to certain machines, there is to be seen the effect of abuse of machinery. In the smaller mills, where the force is composed of one, two, or three men, the case is far worse. Not long ago I was in one of these one-man mills, an establishment in which the miller was man-of-all work, and while there I realized distinctly how impossible it is for one man to do a score of different things, several of which may require attention at the same moment. At one moment the rolls gave warning that something was wrong with the feed. The miller would begin to examine the feed to discover the trouble. While at that work, the purifier was calling for attention. The stock was pouring into one corner of the hopper and running along on one side of the sieve, thus reducing the work of the purifier a third or a half. When the rolls were adjusted to feed properly, the miller hastened to secure an even feed of stock on the purifier, and when that was accomplished he was called to some other point. All day long he was kept between the fat and the fire, and even with the best intentions, the most imperturbable good-nature and the most unwearied diligence that man could not do justice to that plant. The machines showed the want of care, and in that mill the wages of an assistant would be saved in the prolonged satisfactory use of the machines brought about by employing him.

It is plain that in too many cases supposed economy is only the sheerest waste. The owner who boasts that his mill is run by one man, while that of his neighbor, of the same capacity, is run by two men, may make himself believe that he is really saving the wages of one man, but at the end of a given time the condition of the two mills should be taken into account. Generally it will be found that the mill run by the single man-of-all-work has wasted more grain, yielded less flour, worn out more machinery and given less satisfaction to patrons than the mill that was fully manned and therefore properly run. Owners can not ignore this point with profit. What they may seem to save in employing too little help they will surely lose in deterioration of plant and unsatisfactory quality of product.

DON'T believe the man who describes to you a dress for a buhr that will enable the stone to handle wheat without cutting the coat of the wheat berry. The buhr is bound to cut the skin, and no dress will take away that peculiar quality of the buhr. Always look out for the wonderful devices of the quacks and the cranks.

"Do we see many cranks?" said an old miller in reply to a question. "Well, not exactly millions of them, but nigh on to it. You'd think a dusty old mill would be the last place likely to be visited by cranks, but they come, and they bring their crazy notions with them. A month ago one of these curious freaks called on me and showed me a diagram of an entirely new system of milling. It was new, very new. The crazy fellow, evidently a man of education, had a theory that wheat could be turned into flour in a queer way. He started in with a cyclone pulverizer, which, he said, would convert the cleaned grain into a fine powder in a moment. That powder, containing the bran, germ, flour

and every other part of the grain, was to be conducted into a suitable apartment, and the flour was to be separated from the rest of the mass by electricity flashed through the apartment. The man actually seemed to believe that his idea was all right. He was an extreme case, of course, but others nearly as bad often come around, until I often wonder where they come from and how they manage to live."

"FROZEN wheat will make just as good flour as unfrosted wheat." That statement has been going the rounds, in various forms, from Winnipeg to London and from Minneapolis to San Francisco. I do not believe it. No sane miller believes it. No baker believes it. Inquiries among bakers, who have had samples of frosted-wheat flour sent to them from the Northwest, show that this flour "does not look right, does not dough right, does not rise well, and does not make good bread." All the same, the sensationalists and the falsifiers will go on recommending the purchase and grinding of frosted wheat, and some unwise boomers are going so far as to plant frosted grain. The fools are not all dead yet. The class seems to be increasing rather than diminishing. It may be depended upon that any grade of wheat below the best will make flour that is not the best, and that the best wheat is in the end the cheapest wheat to buy.

LONDON wheat importers are described as "jubilant" over the "magnificent" wheat crop of Argentine Republic, which is now being harvested. The "magnificence" of the Argentine wheat crop will be appreciated in the United States when it is announced that "Argentine will be able to export from 12,000,000 to 14,000,000 bushels on this crop." Last year that country exported about 10,000,000 bushels. This season the increase of 2,000,000 to 4,000,000 bushels estimated for export is more than offset by the fact that Chili is short several millions of bushels and the Australian colonies will have from 8,000,000 to 10,000,000 bushels less than last year. A general view would appear to justify the hope of a recovery in prices rather than a decrease during the next few months.

A WRITER on shafting recently observed that "a shaft of half the weight, running at twice the speed, will transmit just as much power as one of full weight and slow speed. There is an actual economy in many items resulting from the use of shafting of small diameter running at high speed. There is economy in the purchase of the shafting, saving in couplings and hangers which will be lighter, pulleys transmitting a higher speed will be smaller, hence lighter, the belts traveling at high speed will be smaller and lighter, and the building supporting such light transmission can be lighter and cheaper, and there are many more advantages."

The American Flour Mfg. Co., Loup, Neb., embarrassed. This company was incorporated last November under the laws of New Jersey, with \$100,000 capital, and succeeded the Loup City Roller Mill Co.

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**LEATHER MADE FROM WOOD.**—Dr. George Thenius, of Vienna, has a process for the manufacture of artificial leather from red beechwood. The best wood for the purpose is taken from 50 to 60 year old trees, cut in the spring, which must be worked up immediately, bark peeled off, steamed, treated with chemicals in a kettle under pressure, and exposed to several more operations, which the inventor does not mention, as he wants to have them patented. From the prepared wood strong and thin pieces are made by means of heavy pressure. The inventor states that a solid sole-leather can be obtained, which he claims is superior to the animal leather in firmness and durability and can be worked up in the same way as animal leather, nailed and sewed.

## GENERAL NOTES.

In Manchester, England, there are a hundred places where horse meat is sold, and it is eagerly purchased by the poorer classes, it being 10 or 11 cents per pound, while beef is 25.

It is computed that if one horse can draw a certain load over a level road on iron rails, it will take  $1\frac{1}{2}$  horses to draw the same load on asphalt,  $3\frac{1}{2}$  horses to draw it on the best Belgian block, 5 on the ordinary Belgian pavement, 7 on good cobblestones, 13 on bad cobblestone, 20 on an ordinary earth road, and 40 on a sandy road.

## COTEMPORARY COMMENT.

During the late bull movement and until recently in fact the better grades of spring wheat flours have been held at 25 to 75c per barrel above the corresponding grades of winter, and naturally buyers have given the latter the preference. On the medium and low grades prices have differed but little. Spring-wheat millers must under the circumstances be gratified to see that prices at the west declined much more rapidly than in the east, but they are still too high to admit of a free and healthy movement that will prove profitable to the miller.—*Minneapolis Market Record*.

At the meeting of millers at Terre Haute, Ind., a gentleman whose name has been prominent in milling circles read an extract from a letter sent him by the publisher of a milling journal. The gentleman in question owes it to himself and the milling public to publish that letter. When a journal attempts to coerce people by making threats, it is time that honest people should be informed of its character. This is a part of the "enterprise" in milling journalism which one of the Minneapolis delegation at Milwaukee thought was so commendable. Should he once become the victim of "enterprising" malice, he would doubtless change some of his views in regard to journalism.—*American Miller*.

## MILLING PATENTS.

Among the patents granted December 25, 1888, are the following:

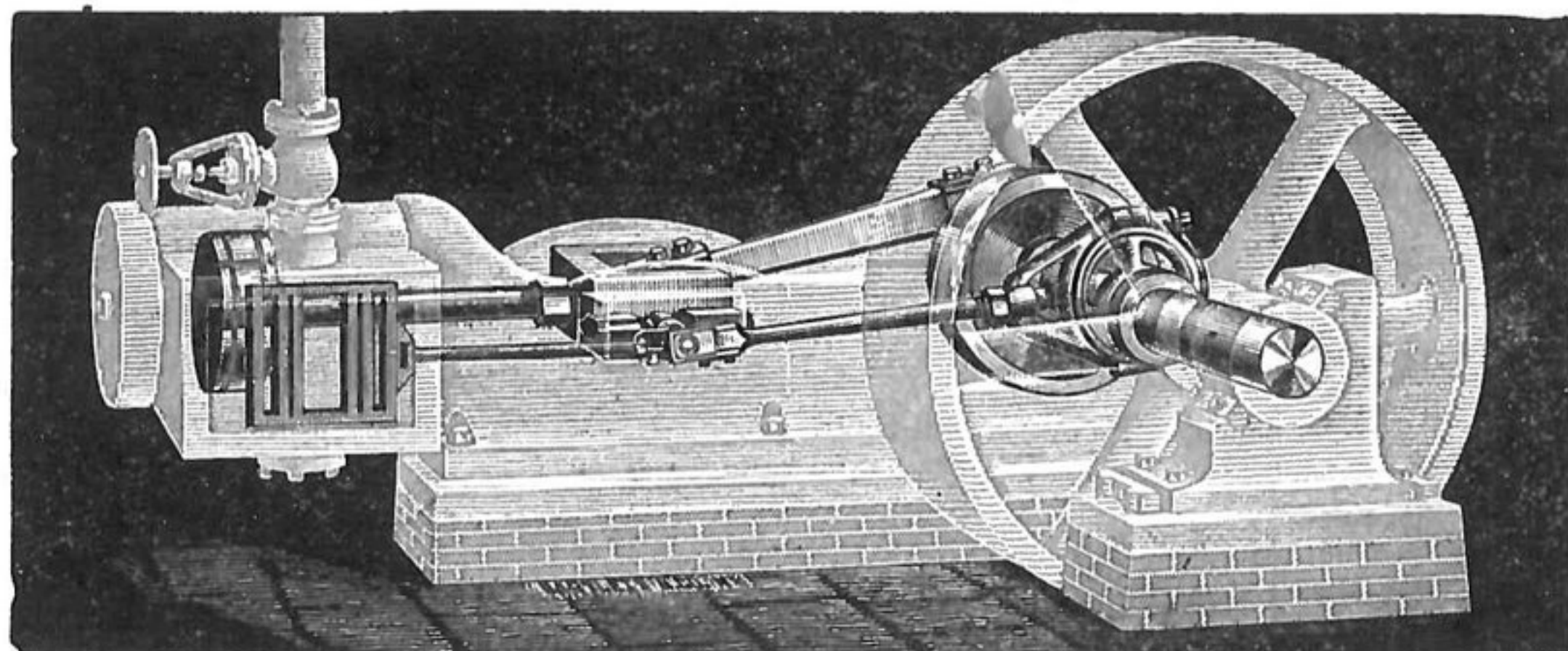
Wm. M. Kennedy, Pittsburgh, Pa., No. 394,985, a rotary bolt.

Chas. S. Alderman, Danville, Ill., No. 395,026, bolting-reel.

Geo. P. and Robert B. Jameson, Abingdon, Ill., No. 395,057, an automatic grain-scale.

John B. Nichols, Milwaukee, Wis., No. 395,168, separator.

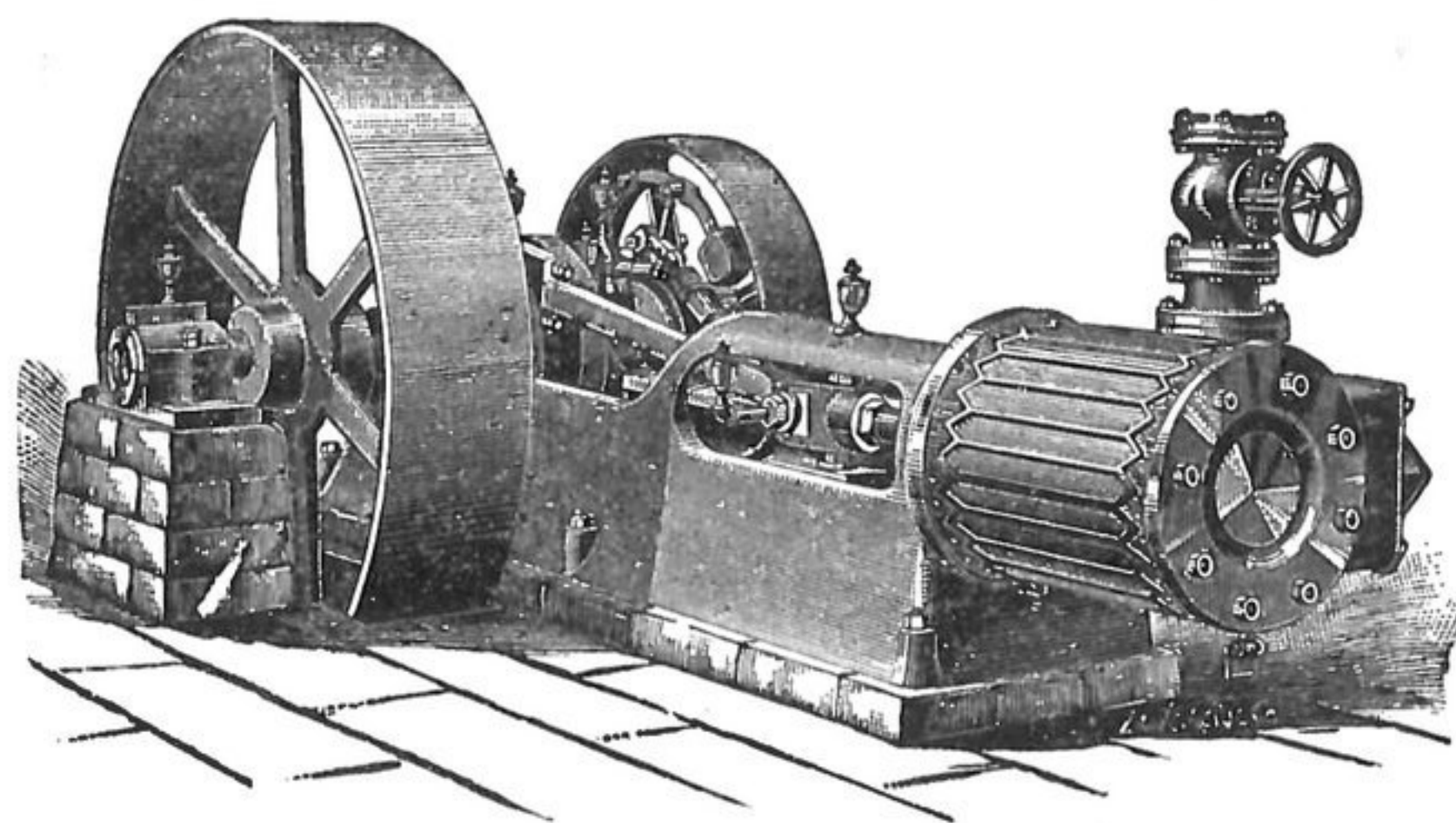
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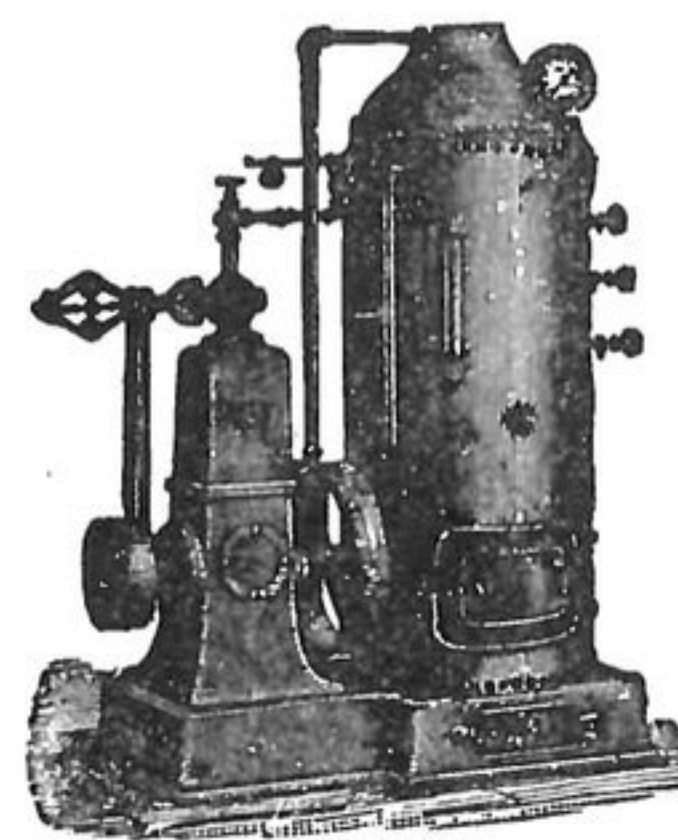


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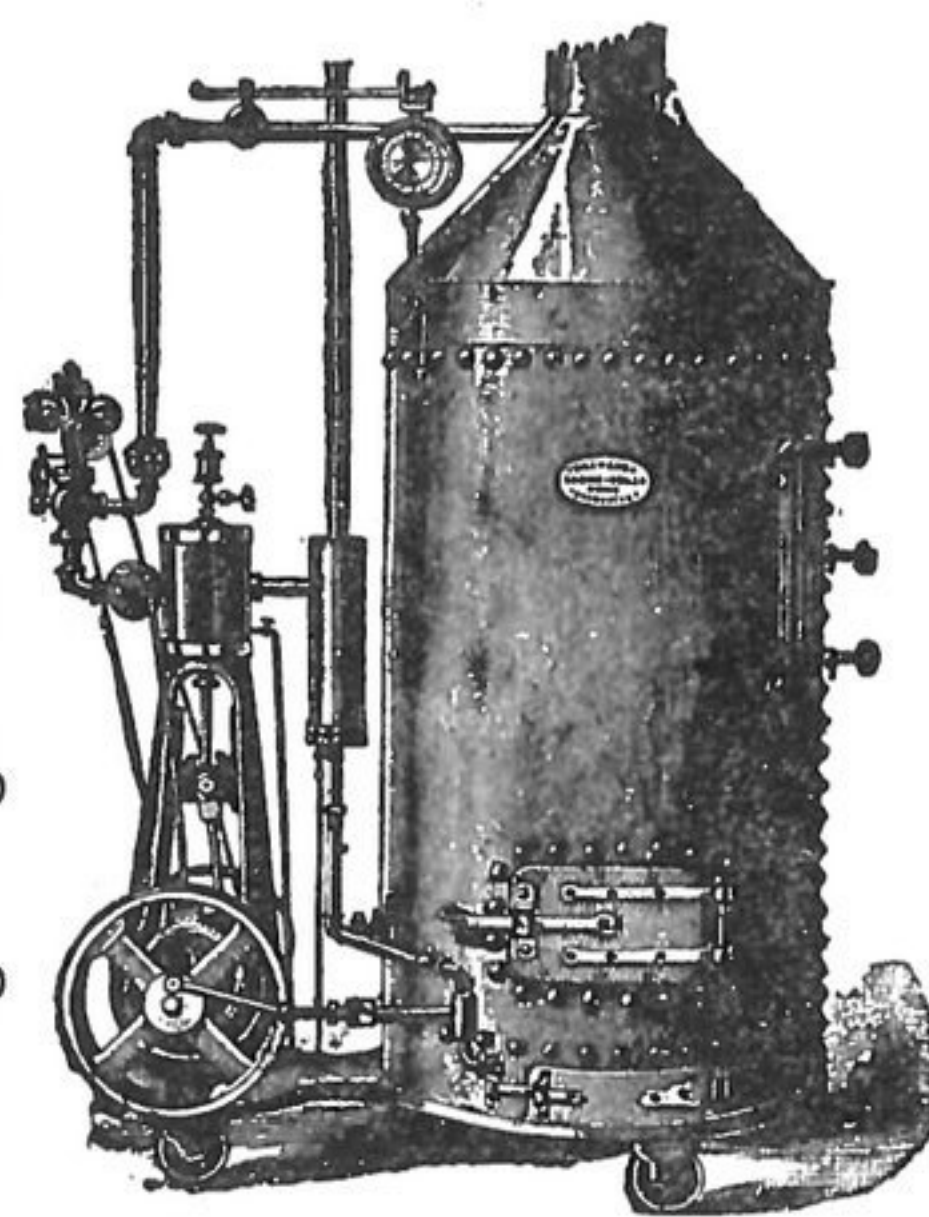
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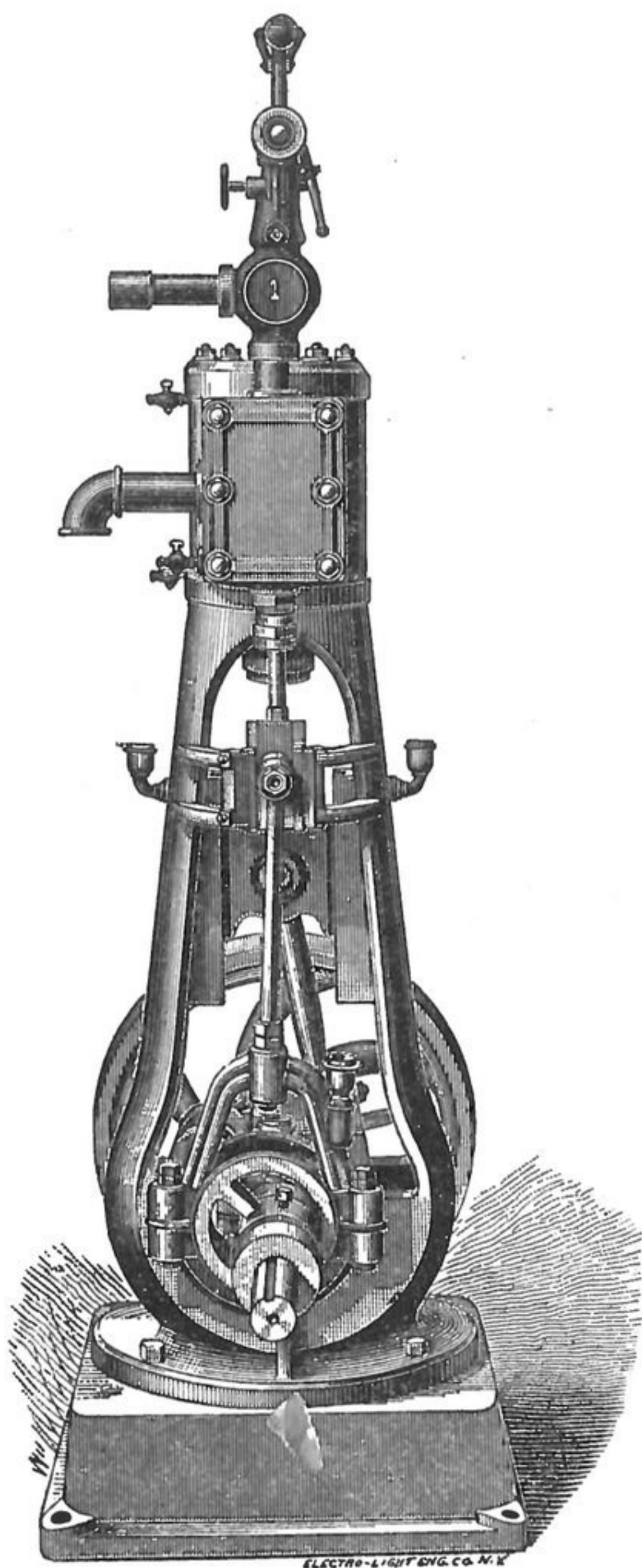
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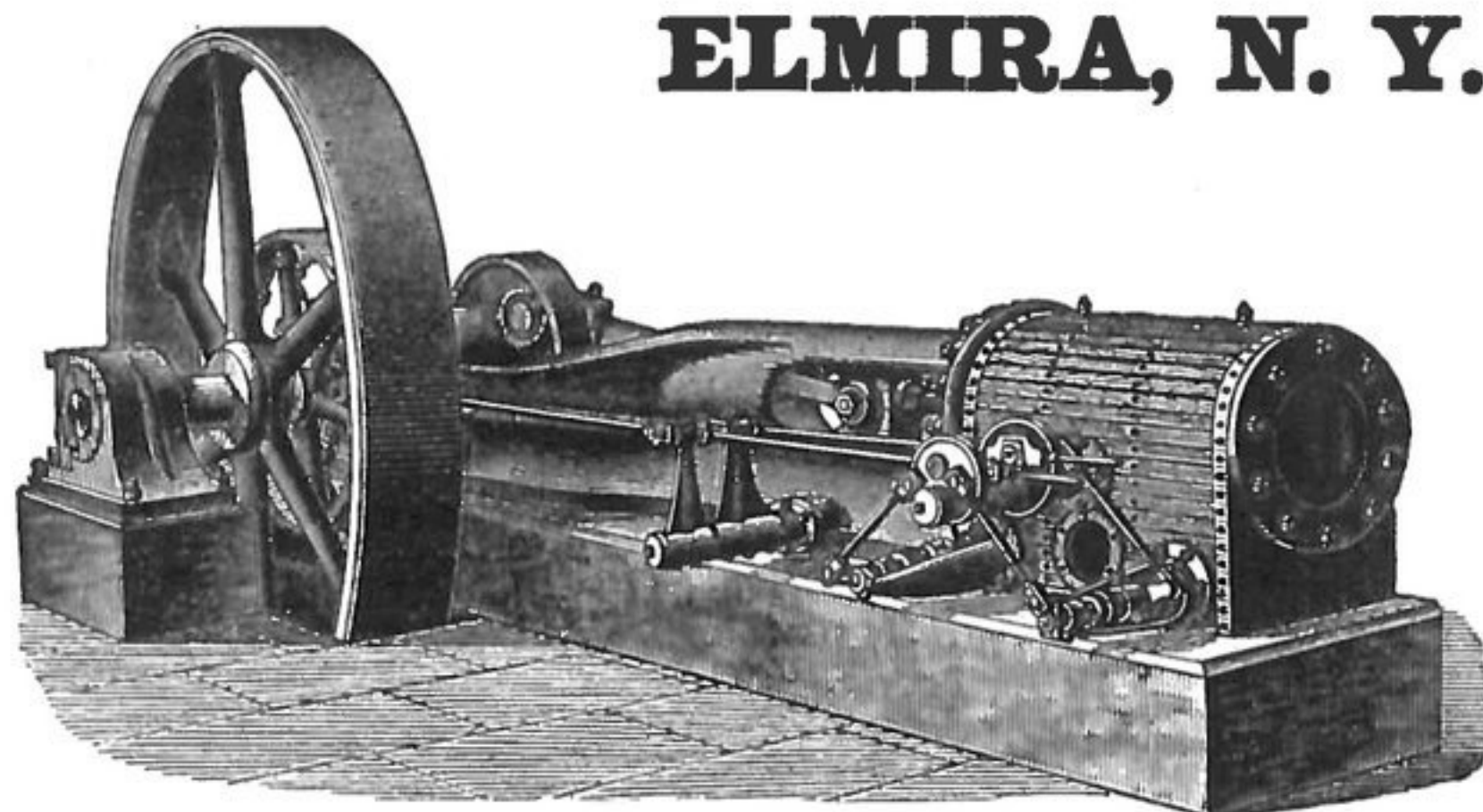
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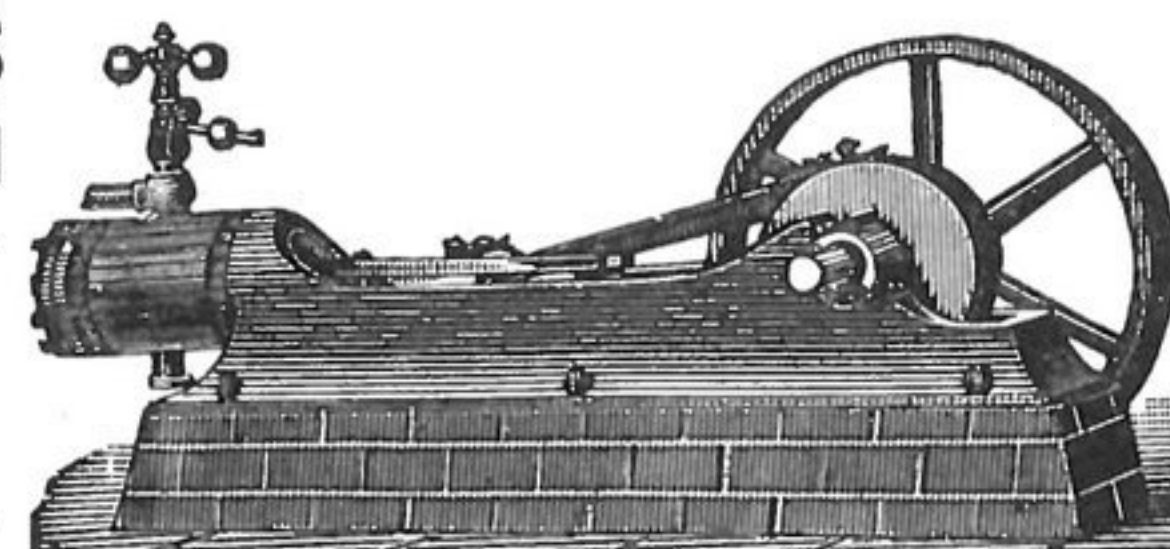
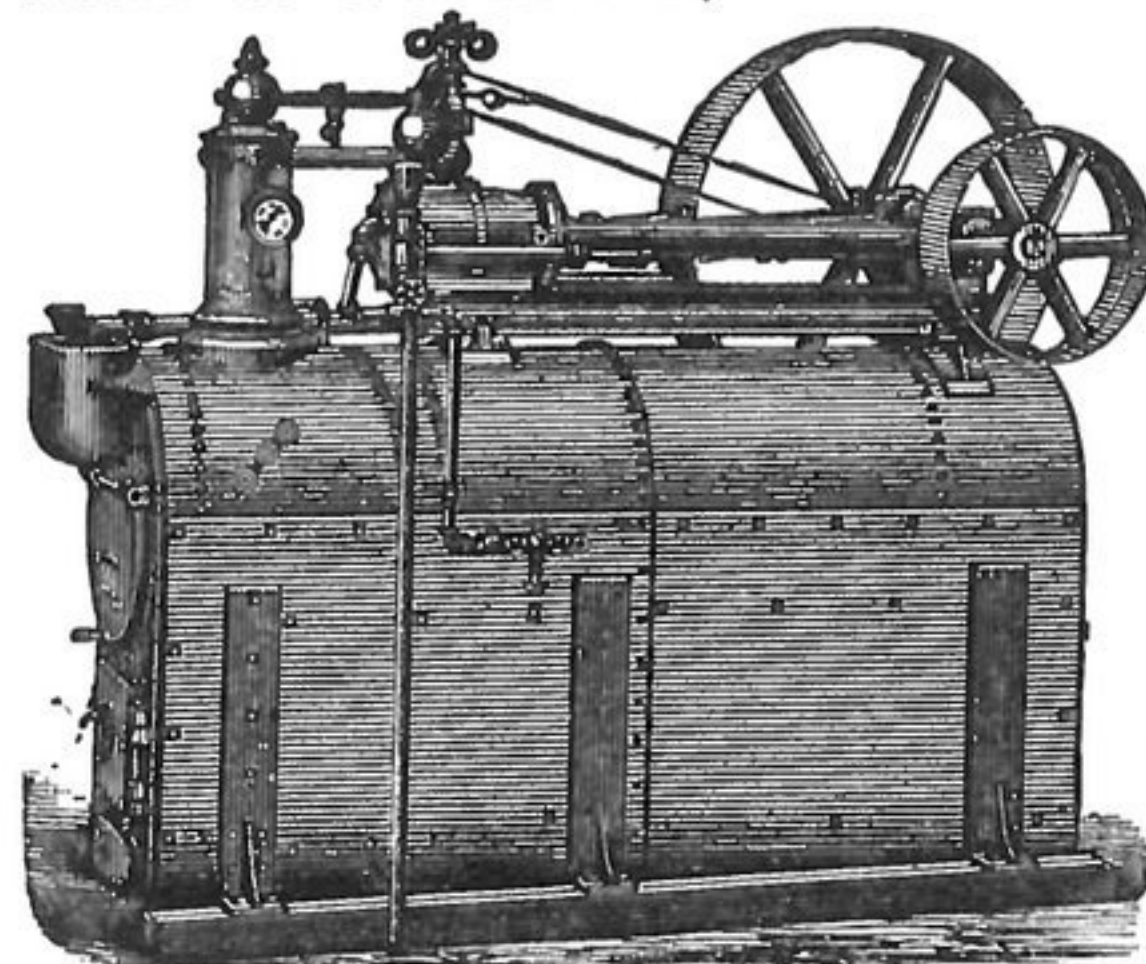
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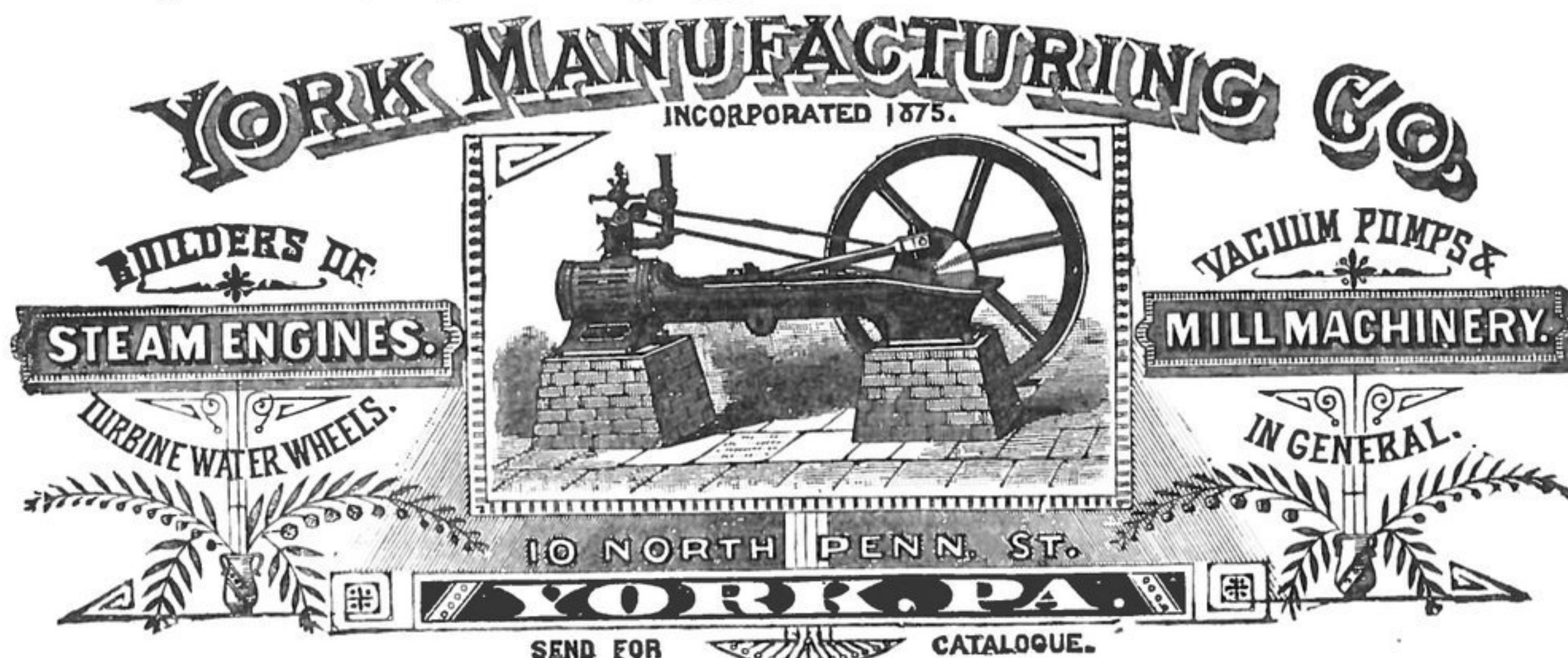
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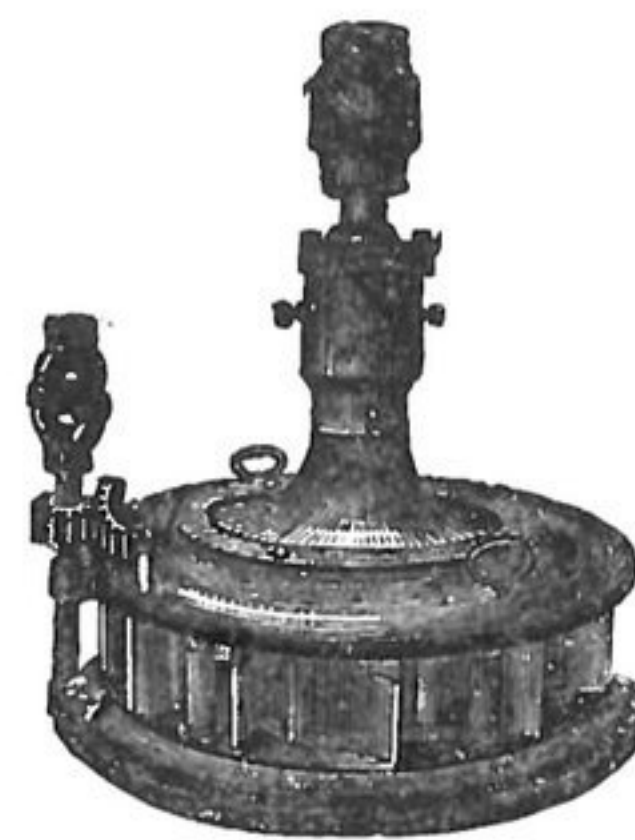
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**SEND for ILLUSTRATED CIRCULAR with PRICES.**





Snooks Bros., Utica, Md., build a corn-mill.  
 Ellair Bros., grain, Detroit, Mich., dissolved.  
 W. W. Cole, grain, Bristol, R. I., burned out.  
 H. P. Cooper, miller, Saratoga, Kan., received.  
 Crowell & Ivy, Bilesville, N. C., start a corn-mill.  
 M. J. Little's grist-mill, Brookhaven, Miss., burned.  
 A. W. Tenny, flour and feed, Faribault, Minn., sold out.  
 The Riley flour-mill, Brookville, O., burned; loss \$6,000.  
 W. S. Armstrong, miller, River Falls, Wis., quit business.  
 C. R. Ross, Madisonville, Ky., builds a 175-barrel roller-mill.  
 Macomber Bros., flour and grain, New Bedford, Mass., failed.  
 W. Passmore, miller, Fairville, Pa., now W. & H. C. Passmore.  
 Cedillion & Co., Elm Grove, W. Va., built a 75-barrel roller mill.  
 J. W. Flynn & Co., grain, Detroit, Mich., now C. V. Bryan & Co.  
 McCall & Clark, millers, Montrose, Colo., succeeded by N. G. Clark.  
 Johnson & Barnes, feed-mill, Binghamton, N. Y., now C. H. Johnson.  
 Hill, Taliaferro & Foster, Taliaferro, Ga., rebuild their burned corn-mill.

Australia is importing both wheat grain and flour from the United States.

W. J. Myers & Co., Princeton, K.y, added \$3,000 worth of new flouring machinery.

Abel Richmond's flour-mill, Canandaigua, N. Y., burned; loss \$15,000; insurance \$7,600.

G. H. Dykeman's flouring-mill, Shippensburg, Pa., burned; loss \$15,000; no insurance; fire incendiary.

Sullivan & Kilrain is the name of a company that have arranged to start a \$20,000 "mill" on July 7, 1889.

In consequence of the fall in wheat prices, the St. Thomas, Ont., bakers have reduced the price of bread a cent a loaf.

The official figures place the tonnage of freight on the Erie Canal in 1888 at 4,942,948 tons, against 5,053,805 tons in 1887.

Minneapolis millers are making St. Albans, Vt., the flour distributing center for New England. Two warehouses now building at that place will store 20,000 barrels.

Mr. R. James Abernathy, well known to the readers of THE MILLING WORLD, is bringing out a book on milling. It will be a valuable work, and every miller should have a copy.

D. Keefer, the head of the Keefer Milling Co., Covington, Ky., died January 7, and the failure of the firm was announced on the same day. Liabilities \$150,000; assets said to be \$100,000.

Wm. Carter's grist-mill, New Hope, W. Va., was wrecked by an explosion of the boiler. Seven farmers were in the mill with Mr. Carter when the explosion occurred. J. E. French, Thos. Carter, L. Shields, Eli Shields and John Wimmer were killed and the others were badly injured and burned.

Among the certificates of incorporation filed with the Secretary of State at Columbus, Ohio, Jan. 7, 1889, is that of "The W. G. Avery Manufacturing Co.," of Cleveland, O., capital stock \$30,000. The incorporators are William G. Avery, S. P. Churchill, G. W. Avery, Joseph A. Osborne and B. G. Tremaine.

The receipts of wheat in Philadelphia for the year 1888 were 2,555,000 bushels, against 9,270,861 bushels the previous year. The exports were 1,371,600 bushels, against 8,317,164 bushels in 1887. The receipts of corn were 2,555,600 bushels, against 4,039,000 in 1887 and the exports 847,469 bushels, against 2,286,258 bushels the previous year. The receipts of oats increased from 3,915,100 bushels in 1887 to 4,662,750 bushels in 1888.

The J. B. Allfree Co., of Indianapolis, Ind., have received orders for complete short-system corn-meal outfits, including their "Keystone" four high corn-mill, as follows: James A. Clark & Co., Cumberland, Maryland; Darnell & Dawson, Kokomo, Ind.; Thomas Heaton, Adams, Ind.; Lavelle, Lacy & Billheimer, Washington, Ind.; J. L. Greene & Co., Vincennes, Ind.; Wilder, Moore & Co., Union City, Tenn.; W. L. Jennings, Oakford, Ind.

Says a San Francisco, Cal., paper: Twice as much rain has fallen as to date last year. It is of a steady, quick, soaking character, no storm or winds accompanying it. It has sunk deeply into the earth all over the state, and even if the winter proved dry, enough moisture has been absorbed by the earth to do the crops till spring. It is deemed certain from the character of the rain falling that we will have a wet winter and a showery spring. Larger crops of both wheat and barley are therefore promised, if we have moderate spring rains.

Says the Toronto, Ont., *Mechanical & Milling News*: Most people thought that the Ontario Oatmeal Millers combine was dissolved into its original elements on or about the first of September last. In view of this it was a matter of some surprise to learn that a secret meeting of the Association was held the other day in this city, at which the following gentlemen are said to have been present: Mr. Wm. Scott, Ottawa, president, in the chair; Mr. Thomas Martin, Mount Forest, vice-president; Mr. D. R. Ross, Embro, secretary; Messrs. Edmonds, Lynn Valley; Thompson, Mitchell; McDonald, Woodstock; Stewart, Ingersoll; Tilson,

Tilsonburg; Wilson, Fergus; Andrews, Thornbury; McDonald, Toronto; Murton, Guelph; J. D. Moore, St. Mary's, and others. The matter of most importance which came up for consideration at the meeting is said to have been the subject of continuing the existence of the Association for another year. With this object a committee was appointed to make such changes in the constitution of the Association as it is hoped will increase its efficiency.

The seventh annual banquet of the George T. Smith Middlings Purifier Co., Jackson, Mich., was given at the Hibbard House, in that city, on January 1. An elaborate bill-of-fare was provided for nearly 100 guests, including many of the prominent business men of Jackson. The dining-room was handsomely decorated with greens and flowers. A large center-piece, made by Mr. Smith's gardener, was the chief display. It was a floral design representing an old-time windmill. The mill was about four feet high, formed of beautiful flowers. Mr. W. K. Gibson acted as toast-master and read the report of the directors of the company, sketching the growth of the organization from 1882, when Mr. Smith became the possessor of a majority of the capital stock. At that time it had no foundry, no iron-working machinery, and only a small plant in toto. Now the plant is worth over \$250,000. In May, 1882, the company had only \$11,500 to its credit, and since that time it has paid its stockholders 25-per-cent. dividends on its \$300,000 of stock, besides expending enormous amounts in adding to the plant. Hon. Henry A. Hayden responded to the toast "Old and New Milling," Hon. Edward Nichols, of Battle Creek, to "Threshing," R. H. Emerson to "Cyclone Dust Collectors," Gen. W. H. Withington to "The Business Man of To-day," Judge Erastus Peck to "The Relation of the Legal Profession to Manufacturers," S. S. Heywood to "The Canadian Branch," John E. Winn to "Bad Collections," and R. H. Emerson and Thomas A. Wilson to others. The banquet-hall was not deserted until 2 o'clock in the morning, and the seventh banquet was voted an entire success.

#### BOOKS AND PAMPHLETS.

No. 96 of *Good Housekeeping*, the first number of the New Year, opens with an illustrated article on "A Dish of Oysters," which gives interesting information about oyster culture and many formulas for the preparation of oysters for the table. Catherine Owen has a chapter on "Family Cakes," and Florence Howe Hall writes a very helpful paper on "The Etiquette of Invitations." The second of Miss Parloa's "From Soup-Tureen to Pudding-Dish" gives directions for another good dinner. There is an especially good story by Bessie Chandler, "Miss Elizabeth's Seven Offers," and another of Rachel Macy's excellent letters on "Quaker Housekeeping." A large quantity of other good things in the *Good Housekeeping* line fills up a very generous number, and a new riddle, "A Donation Party," is offered for the competition of the quick-witted, with very tempting prizes.

*The Century Magazine* for February is a notable number of that great periodical. The contents are rich and varied, and the most valuable article in it is the installment of the Lincoln history, which contains chapters of peculiar interest, describing (1) the events leading up to the final removal of General McClellan, (2) the financial measures undertaken by Mr. Chase and advocated by Mr. Lincoln for carrying on the war, (3) the relations between President Lincoln and secretaries Seward and Chase, including the incident of the simultaneous resignation of the two Secretaries, and the manner in which Mr. Lincoln averted a political catastrophe. The other articles are all up to the high standard of *The Century*. The Century Co. are sending out an enlarged reproduction of the map of Siberia published in the May *Century*, showing the route taken by Mr. George Kennan, the author of the remarkable series of papers on the Siberian exile system that have formed so prominent a feature of this magazine for some months. Copies are mailed in a roller to any address for 10 cents in stamps. Address "The Century Co.," Union Square, New York, N. Y.

#### COMMENDATORY LETTERS.

##### ANOTHER ANTE-WAR-TIME SHELTER.

CINCINNATI, Oct. 12, 1888.

CINCINNATI CORRUGATING CO., CINCINNATI, O.

*Gentlemen*: The building on Sixth and Lock streets, this city, now owned and used by us as a hospital, has on it a corrugated iron roof, which has been doing effective service for over 28 years. It was constructed by the United States Government for a marine hospital, but before it had been used, the war broke out, and it was taken instead for a general military hospital and used for that purpose for five years. In 1866 it was put up at auction and bid in by a couple of public-spirited gentlemen, who presented it to the Sisters for a hospital. The sheets composing the roof, 7 feet long, are of No. 24 iron and are in a remarkably good state of preservation. The last coat of paint which was put on about four years ago has scaled off slightly in some places, leaving a smooth, uncorroded surface of iron beneath, but over most of the surface the paint has adhered tightly. The only unfavorable condition of the roof was caused by the sagging of the sheets between the cross supports, or purlins, the latter being 5 feet apart, too great a distance, without other strips or form of sheathing.

SISTERS OF CHARITY, GOOD SAMARITAN HOSPITAL.

#### PERSONAL MENTION.

Mr. H. P. Weeks, representing the *Manufacturers' Gazette*, Boston, Mass., was among our visitors during the past week.



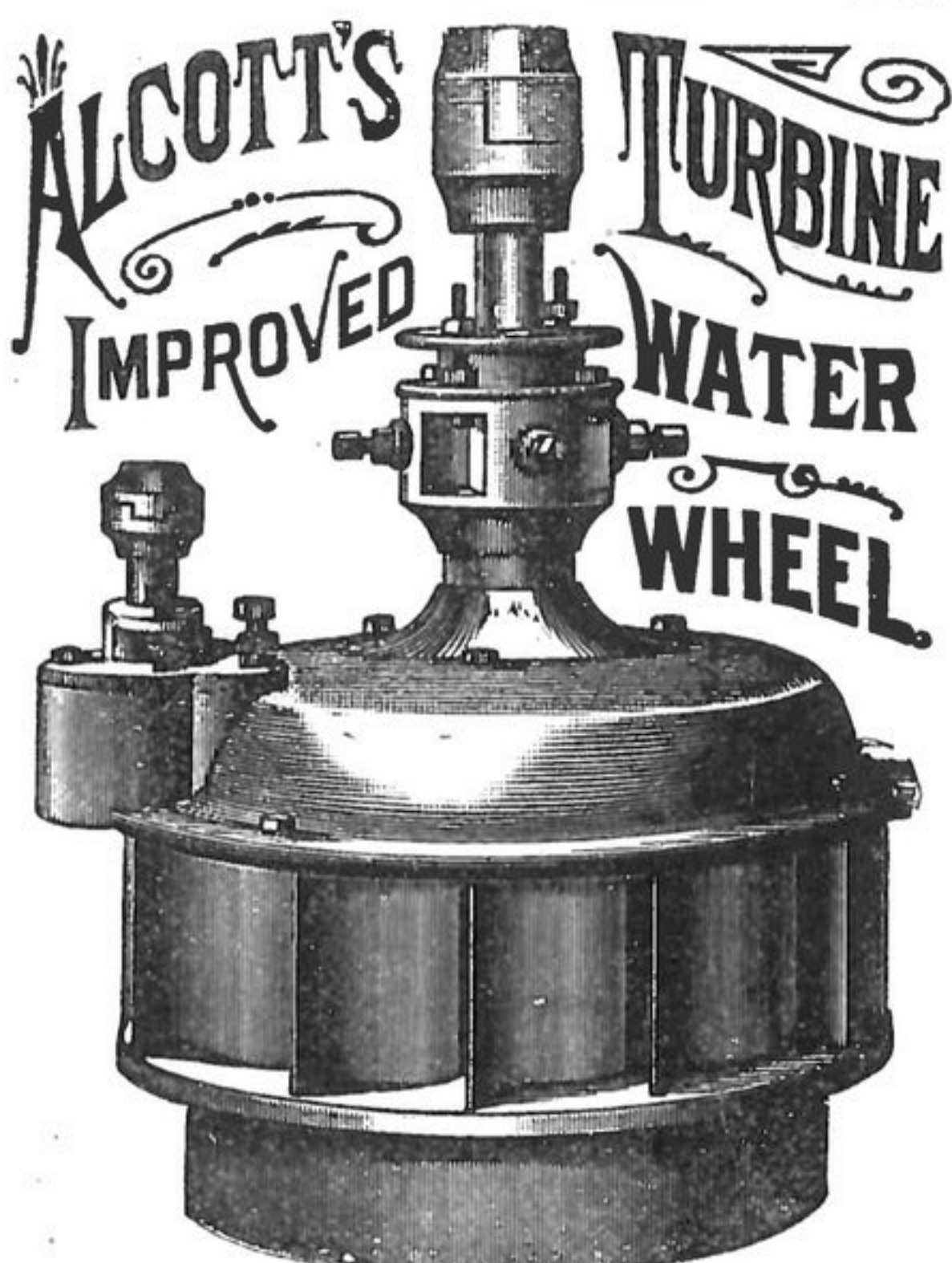
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FOR MANUFACTURERS.

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THIS WHEEL GIVES HIGH RESULTS, AND IS ACKNOWLEDGED THE BEST, MOST PRACTICAL AND EFFICIENT TURBINE MADE. FOR SIMPLICITY, DURABILITY, AND TIGHTNESS OF GATE IT HAS NO EQUAL.

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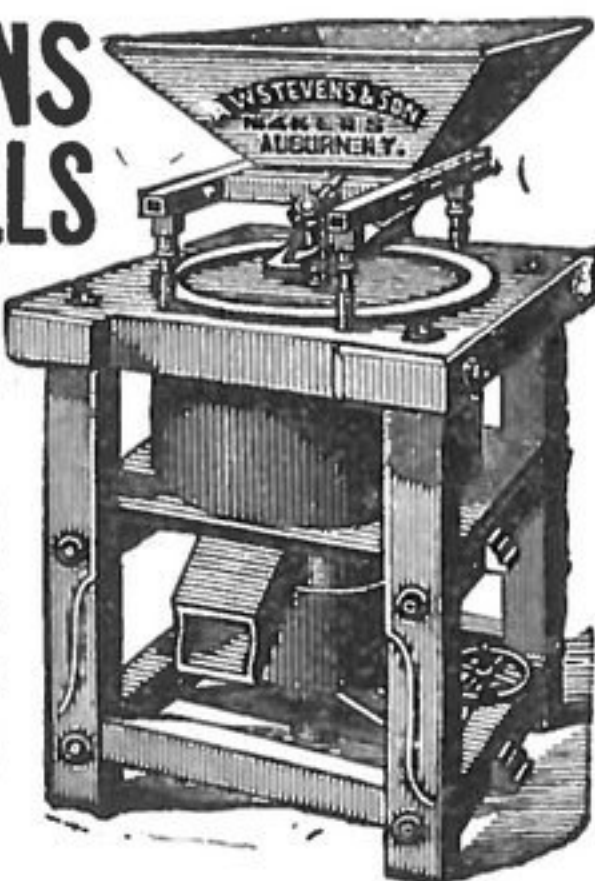
**T. C. ALCOTT & SON,**  
*MOUNT HOLLY, N. J.*

**PLEASE** mention THE MILLING WORLD when you write to advertisers. It will pay you to do this.

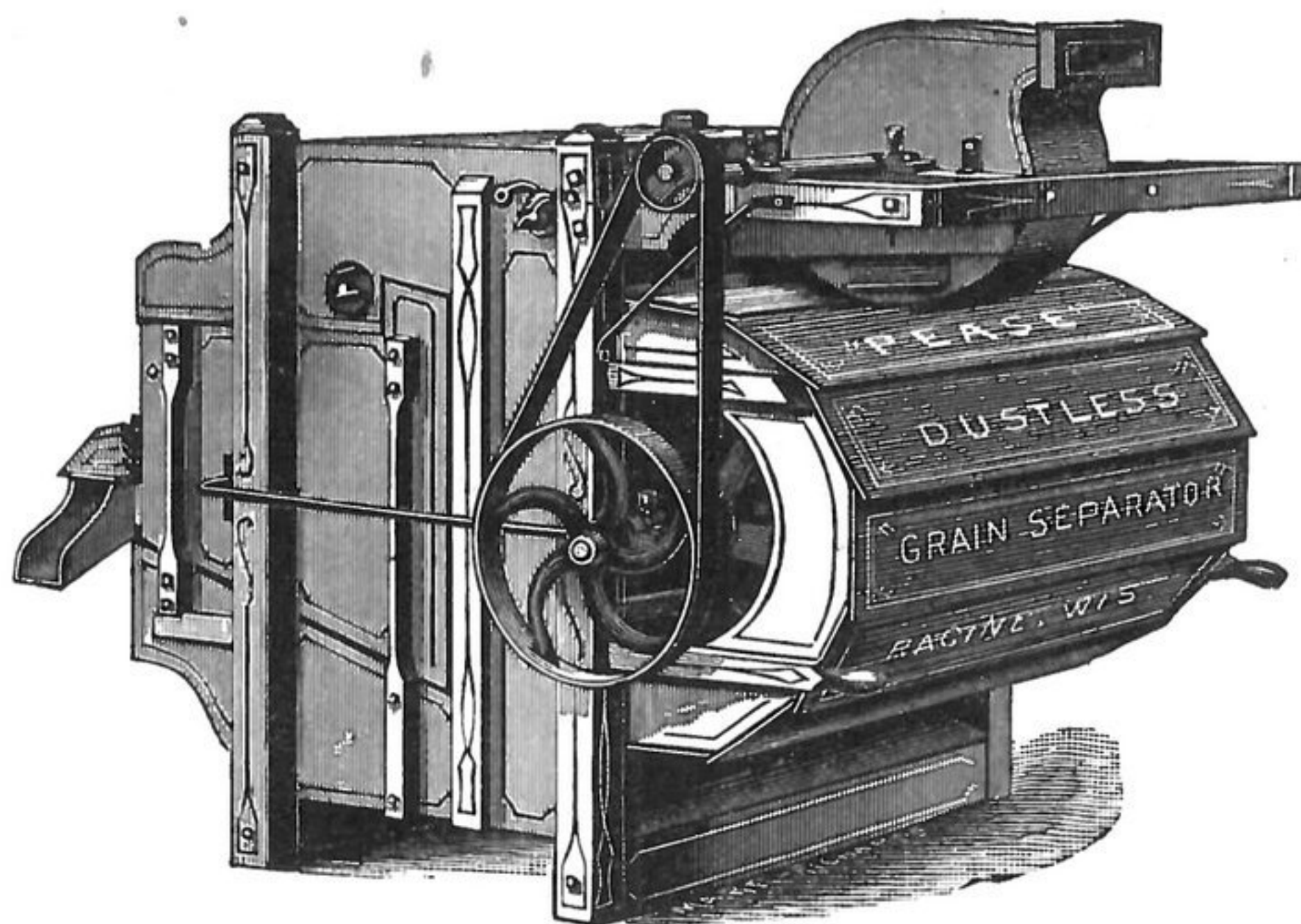
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For CORN and  
FEED GRINDING

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**BUHR STONES**  
Power Corn Sheller  
Prices Below the Lowest  
**A.W. STEVENS & SON**  
AUBURN, N. Y.  
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## THE "PEASE" DUSTLESS GRAIN SEPARATORS.



These Separators not only clean grain, but separate and SCREEN it. They require less space, and less power than any others, and are less expensive.

FANNING MILLS, both side shake (for hand use or power) and also the famous "Pease" end shake mills, for all kinds of grain. Various sizes capacity 100 to 500 bushels per hour.

—THE—

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Elevator Supplies of All Kinds.

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## WASHER

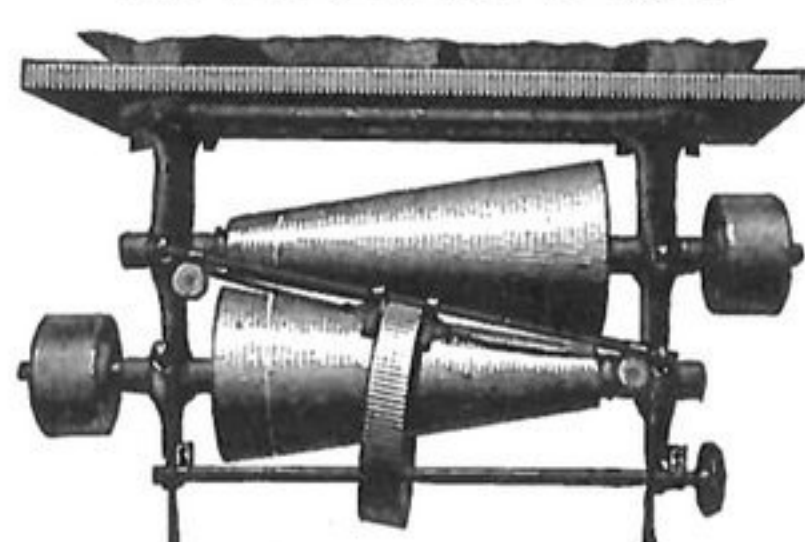
We will guarantee the "LOVELL" WASHER to do better work and do it easier and in less time than any other machine in the world. Warranted five years, and if it don't wash the clothes clean without rubbing, we will refund the money.

**AGENTS WANTED** in every county. We can show proof that agents are making from \$75 to \$150 per month. Farmers make \$200 to \$500 during the winter. Ladies have great success selling this Washer. Retail price, only \$5. Sample to those desiring an agency \$2. Also the Celebrated KEYSTONE WRINGERS at manufacturers' lowest prices. We invite the strictest investigation. Send your address on a postal card for further particulars.

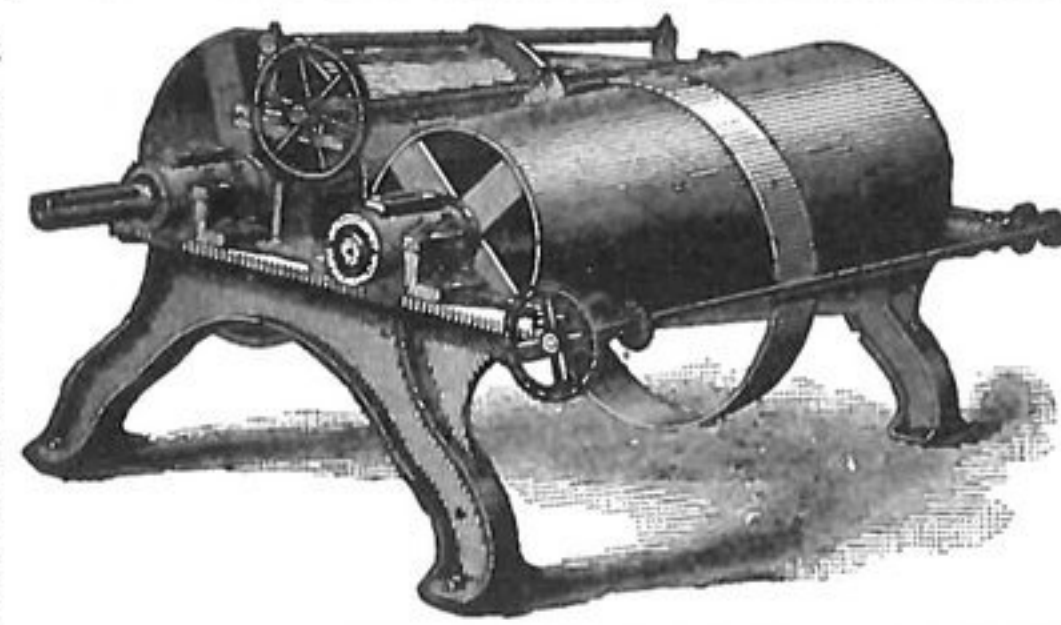
**LOVELL WASHER CO., Erie, Pa.**

## THE EVANS FRICTION CONE & FRICTIONAL GEARING

"PATENTED."

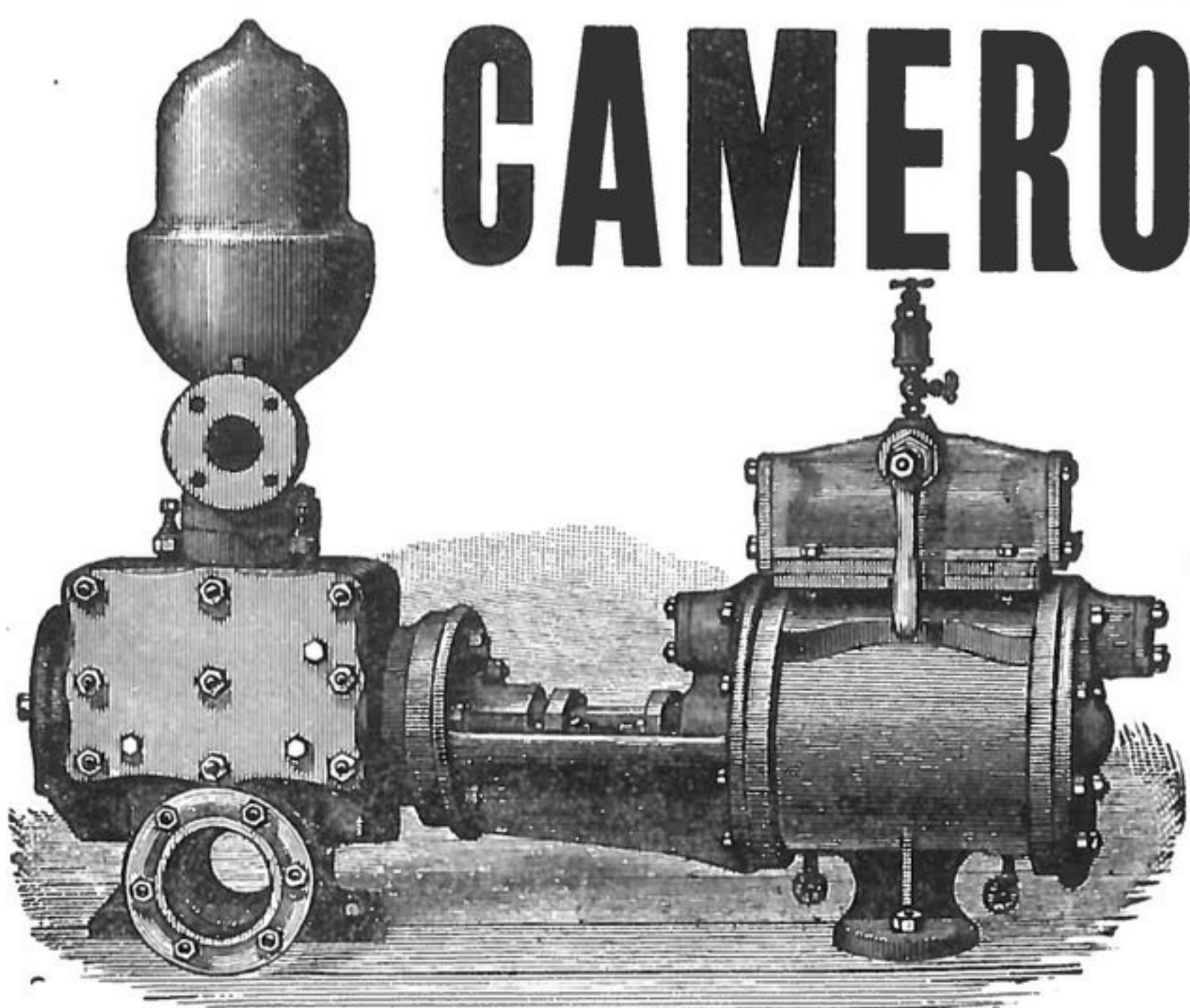


This cut represents a set of hanging cone pulleys. This pattern is intended for that class of machinery that stops and starts at the same speed, and at the same time be able to change the speed more or less while running. These cones are also fitted with a governor where a steady motion is required and the initial power is



fluctuating. All sizes made from 1/2 Horse Power to 50 Horse Power. **SEND FOR ILLUSTRATED CATALOGUE.**

**EVANS FRICTION CONE CO., 85 Water St., BOSTON.**



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Steam, Air & Vacuum Pumps in Every Variety

FOR ILLUSTRATED CATALOGUE ADDRESS

**THE A. S. CAMERON STEAM PUMP WORKS**

Foot of East 23d Street, - New York,



## EUROPEAN ECHOES.

GREAT BRITAIN during ten months in 1888 imported about 4,462,000 bushels of corn from Argentine Republic.

THE official figures place the wheat crop of Great Britain in 1888 at 71,939,647 bushels, against 74,322,747 bushels in 1887.

PORTUGUESE wheat of the 1888 season is not good for macaroni, and the Portuguese manufacturers of that article are importing American wheat in unusually large quantities.

IN France in December the mercury sank several degrees below zero, and the severe cold checked the work of the farmers. The agricultural situation is reported satisfactory.

THORENBERG, Switzerland, has a flouring-mill driven by a water-power three miles away. The power is conveyed to the mill by electricity. A steam-plant was displaced. The new power gives satisfaction.

THE wheat crop of 1888 in Russia, excluding Poland, is officially announced to be 242,524,800 bushels, against 265,622,400 bushels in 1887. The rye crop is up to a full average, thus enabling Russia to export wheat freely.

AUSTRALIAN wheat-crop reports are discouraging. In December reaping commenced in Telowie, the earliest district in Australia, and the yield was only about 4 bushels an acre. In New South Wales and Victoria the crop is thin.

SEVERAL flouring-mills in England, that have been idle for many months, were started up in December and have since been working night and day. The decline in American flour shipments is the cause of the improvement.

A RECENT dispatch from Vienna, Austria-Hungary, announced the collapse of the Hungarian "maize ring" or syndicate. The ring lost 51,000,000 florins, and maize can now be bought for half what the syndicate paid for their holdings.

INDIA has not made up the deficiency of her wheat crop of 1888. It is thought the severe drouth in the Punjab will seriously shorten the crop to be harvested in March, 1889. The Central Provinces also report damage and probable shortage from drouth.

ESTIMATES of wheat stocks in Europe give Great Britain 24,000,000 bushels, France 13,000,000, Belgium 7,500,000, Germany 4,000,000, Buda-Pesth 11,300,000, other Austrian places 5,000,000, Odessa 14,000,000, other South Russian places 6,000,000, with 23,000,000 bushels on passage.

LONDON Corn Exchange quotations on December 24 included the following: Duluth wheat, per 496 pounds, 44 to 46s.; Californian and Oregon 43 to 44s.; Chilian 41 to 42s.; Australian 43 to 45s.; Danzig 40 to 44s.; old white English 40 to 48s. Flour quotations included the following: London, top-price brands, per 280 pounds, 40s.; American patents 39s. to 40s. 6d.; French 38s. 5d.; Hungarian 32 to 38s.; superfine Australian 27 to 28s.; fine Australian 23 to 25s.

SAYS the London "Miller": Foreign samples this season are all remarkably above the range of English wheat, and as the latter furnishes one-third of our wants the inference

is that, with the comparative exhaustion of farmers' deliveries, imported wheat will command the terms reluctantly paid at present. There is really but little competitive underselling of foreign flour this season, and it is doubtful if the spring campaign can change this feature. American mills are not working for export to the extent they do in ordinary years. From Russian and Hungarian mills of course flour may be expected, but only at rates relatively above the English price-level for household qualities.

SAYS the London "Miller" of December 24: America is sending forward such small quantities of wheat that we do not trouble to learn, nor do shippers send word, whether the canals are frozen or not; it does not seem important in December, 1888, what sort of weather they have in the United States. The new crop of winter wheat is starting well, and as Europe keeps its hands in its pocket, and demand is *nil*, wheat has backed out 3c. per bushel from its point of a week ago.

R. HUNTER CRAIG & Co.'s Glasgow Foreign Flour Report of December 14 reports American patents selling at the following prices per barrel: Canadian \$5.72; Michigan \$6.05; Ohio \$6.05; Milwaukee \$6.21; Minneapolis \$6.72 and St. Louis \$6.13. German 1st and 2d quality sold at \$5.29 and \$4.88. Hungarian flours Nos. 0, 1, 2, 3, 4 and 5 sold at \$6.21, \$6.05, \$5.88, \$5.72, \$5.54 and \$5.39 respectively. On the same date the prices in the Liverpool market were as follows: Michigan and Ohio \$6.04 per barrel; Milwaukee \$6.22; Minneapolis \$6.56; St. Louis \$6.21 and Canadian \$5.92. German first and second quality sold at \$5.45 and \$5.04. Hungarian flour Nos. 0, 1, 2, 3 and 4 sold at \$6.25, \$6.05, \$5.88, \$5.70 and \$5.54 respectively.

## ALLEGED MILLING POETRY.

## THE WATER MILL.

Listen to the water mill  
All the live-long day;  
How the clicking of the wheel  
Wears the hours away;  
Languidly the Autumn wind  
Stirs the green wood leaves;  
From the field the reapers sing,  
Binding up the sheaves:  
And a mem'ry o'er my mind  
As a spell is cast;  
The mill will never, never grind  
With the water that is past.

*Sentimental Unknown.*

## THE WIND MILL.

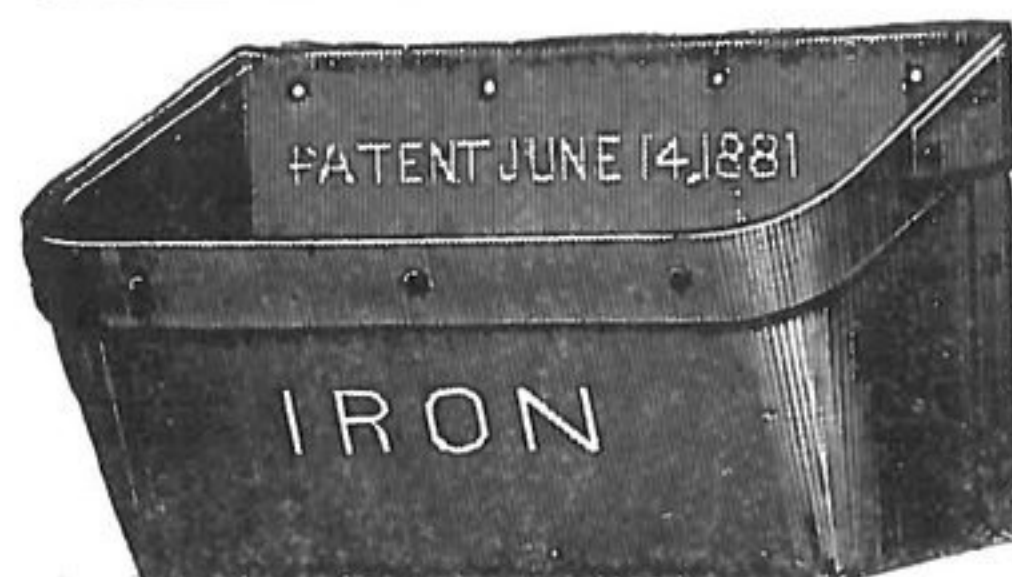
Then listen to the wind mill,  
All the day and night,  
How the fans are never still  
Save when winds are light:  
Creakingly the old trap whirls,  
Turning west or east;  
Run by lazy louts and churls,  
Seldom is it greased  
A thought hits my engaged mind,  
But no spell is cast,  
Ramshackle mills will never grind  
With the breezes that are past.

*Bang.*

## THE STEAM MILL.

Then turn you to the steam mill,  
How it moves in rhyme!  
Waiting wind's nor water's will,  
Running all the time!  
Livelily the puff of steam  
Vanishes in air;  
Miller loafing in a dream,  
Not much trouble there.  
Let no gloom fall on your mind,  
Let no spell be cast,  
Mills equipped with steam can grind  
Right along, tho' all the water and all the wind since  
Noah's rain were hopelessly past!

*Iconoclast.*



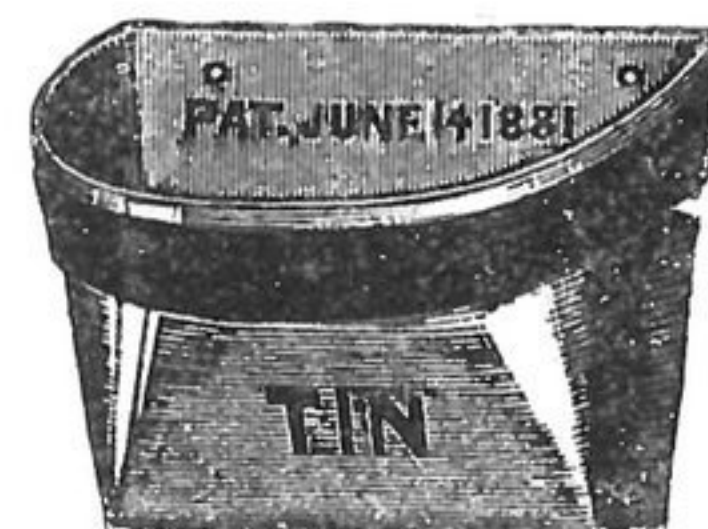
Made of sheet steel, with heavy band.

## BOSS &amp; ELEVATOR &amp; BUCKETS.

If you are interested ask for Prices. Manufactured only by

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16, 18 AND 20 EAST SOUTH STREET.



Made of tinned steel plate, with iron band.



**WANTED** The MILLERS of the United States and Canada to write us for our new pamphlet and revised price list of our JONATHAN MILLS **UNIVERSAL FLOUR DRESSER**. The best machine on the market. The fact that not a single one has ever been displaced by any other Reel speaks volumes.

We carry a full line of Heidegger & Co.'s Bolting Cloth and Gritz Gauzes. Give us trial order.

**THE JONATHAN MILLS MFG. CO.,**  
CLEVELAND, OHIO, U. S. A.

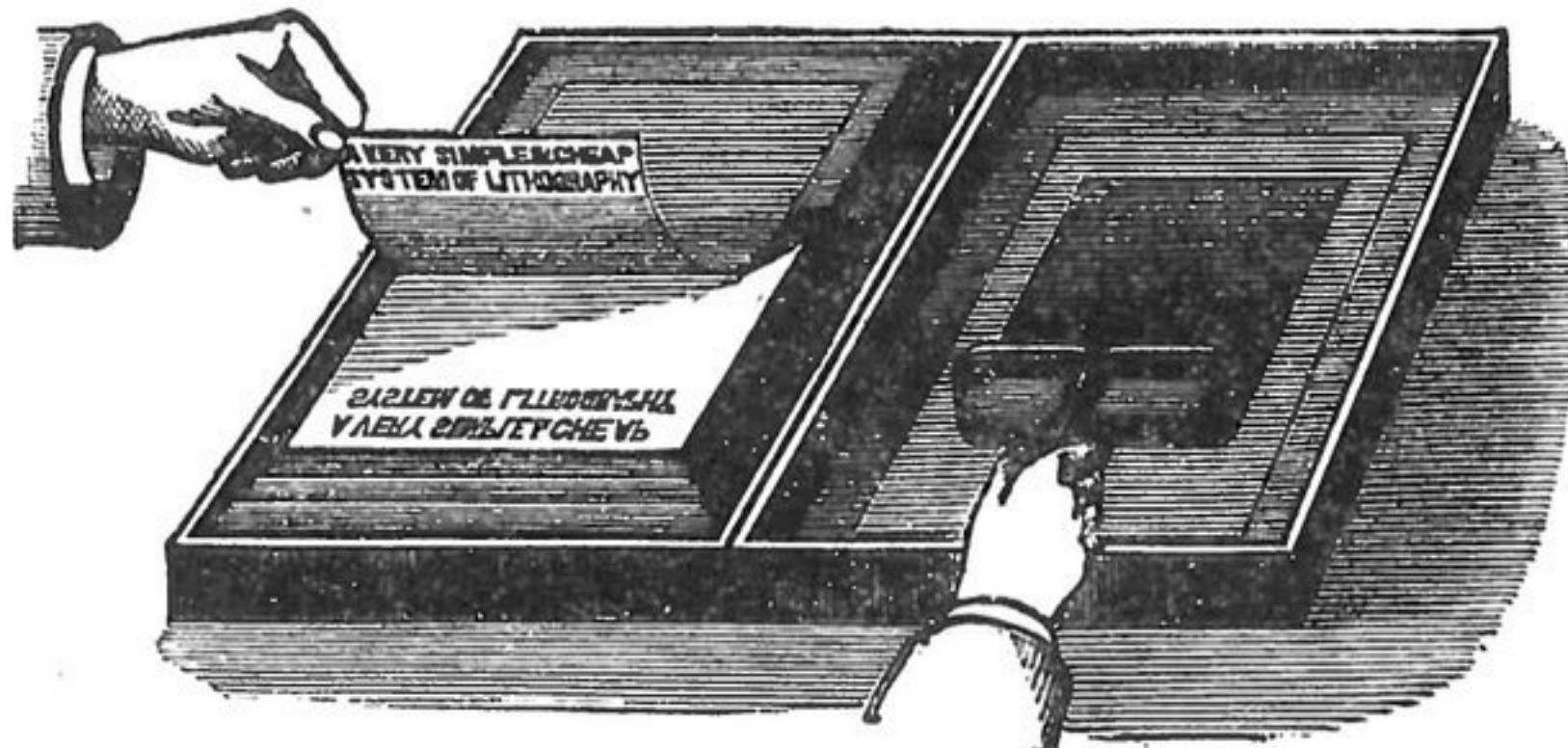
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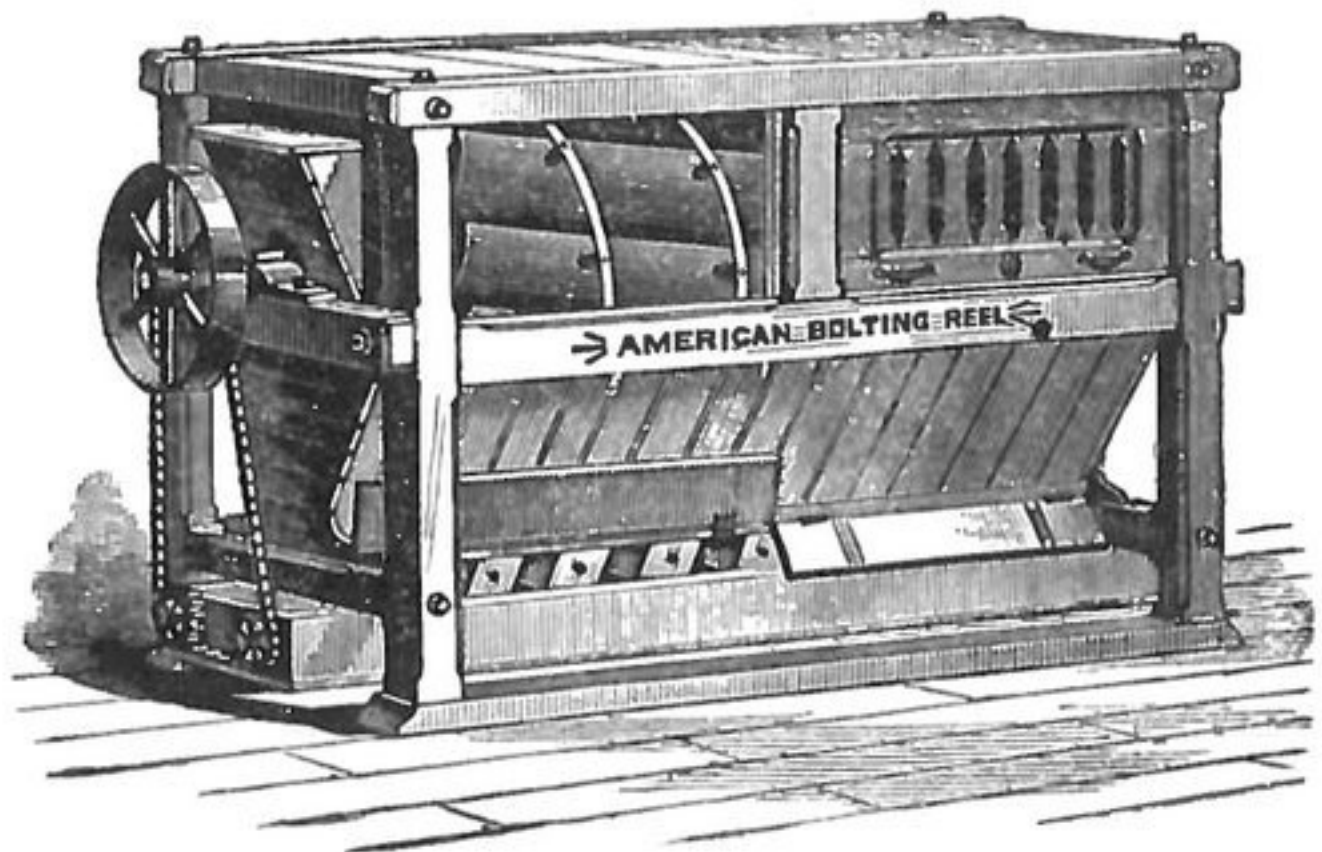
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**CHEAPEST, BEST! IT BEATS THEM ALL!**

THE

# American Bolting Reel

THE AMERICAN BOLTING REEL embraces many entirely new features and advantages for bolting all kinds of milling stock: being adapted for either soft or coarse stock. Its capacity is not surpassed; will bolt freely in warm weather; no clogging or wearing of cloth.



A trial will prove to your entire satisfaction its great superiority as a Bolting Machine.

I will supply these Reels to be tested with any other and leave the judgment with the miller.



In presenting the American Bolting Reel to the milling public, I call the attention of every miller and mill owner to the following facts:

- 1st. For simplicity, durability and capacity it has no equal.
- 2d. The American Bolting Reel is not surpassed by any other, for handling all kinds of break stock, dusting middlings, stock from smooth rolls, middlings stones, or re-bolting cut-offs and break flour. Buhr millers will greatly improve their flour both in quality and color by re-bolting on the American Bolting Reel.
- 3d. When in operation the Reel is in perfect balance, the stock being evenly distributed on either side, therefore requiring less power and less wear of cloth as a result. The machine is built of selected material and is not surpassed in finish.
- 4th. It is just the Reel millers have long sought for to take the place of centrifugal and other Reels not giving entire satisfaction.
- 5th. The Reel can be driven from either end.
- 6th. The Reel runs slow, quiet and smooth.

WRITE FOR CIRCULAR AND PRICES.

THIRTY DAYS' TRIAL GIVEN.

**D. G. REITZ, BERLIN, PENN.**



# THE Grain & Flour Trade

OFFICE OF THE MILLING WORLD,  
BUFFALO, N. Y., January 12, 1889.

On Friday of last week, in consequence of small speculative effort, the grain markets were dull, lower, weaker and more irregular. January wheat opened at \$1.01 and closed at \$1.00½. There was some foreign buying. Options 2,000,000 bushels. January corn sank to 44½c. at closing and oats at 31½c. Wheat flour was dull and quiet, although the market was full of buyers looking for winter straights and spring patents and waiting for concessions on the selected stocks. The minor lines were quiet and unchanged.

On Saturday there was more activity in the markets. January wheat closed at \$1.01 on better cables in consequence of severe weather that cut off Russian supplies. January corn closed down at 44½c., with a good export demand. January oats ruled at 31½c. Wheat flour was dull and practically unchanged, with all the millers evidently standing by their agreement not to cut prices. The minor lines were unchanged.

On Monday there was an unsettled condition all along the line, in consequence of the visible statement. January wheat opened at \$1.01 and closed at \$1.00½. Options 2,000,000 bushels. January corn advanced to 45c. at closing on light receipts and fair export trade. January oats closed at 31½c. Wheat flour was steady on improved export demand for No. 1 springs and winter clears and straights for European and West Indian markets. A member of the flour fraternity who made a thorough canvass of the trade on January 1 reported on hand about 500,000 barrels of spring and winter flour, instead of the 750,000 barrels guessed at by certain misleading authorities. Since that canvass the winter stocks have decreased rapidly. The other lines were unchanged and featureless.

On Tuesday covering by shorts, lighter receipts in the west and better foreign markets made the breadstuff markets decidedly stronger. January wheat in New York opened at \$1.00-5-16 and closed at \$1.00¾. Options 2,300,000 bushels. Trade was scattering. January corn strengthened up to 45½c. at closing and oats to 32c. Wheat flour was less active, but unchanged and featureless. Minor lines were quiet.

The visible supply in the United States and Canada was:

	1889.	1888.	1887.
	Jan. 5.	Jan. 7.	Jan. 8.
Wheat.....	37,923,374	43,857,126	63,345,689
Corn .....	10,141,000	6,184,914	15,077,848
Oats .....	8,621,454	5,896,187	4,877,847
Rye .....	1,666,174	300,658	438,607
Barley.....	2,770,014	3,328,203	2,724,079

Wednesday was a day of dull and easy markets, with January wheat trembling at the dollar notch, opening at \$1.00¼ and closing at \$1.00½. Options 950,000 bushels. It was not plain what caused the weakness in wheat, as both public and private cables were steadier, spot demand from Europe was better and receipts in the west were lighter. Notwithstanding all these influences, wheat was weaker and trade was small. January corn opened at 45½c. and closed at 45¼c. January oats ruled at 32c. all day. Wheat flour was steady in tone, with few weak spots, and holders were firm at the slight improvement on all grades on the reduction of stocks, which goes steadily on since the shortening of production in the West. The European demand was also improved at full prices for Nos. 1 and 2 springs and No. 2 winters. Superfine springs and fine winters were advanced 5@10c. on considerable lines under cable refusal. The minor lines were featureless.

On Thursday there were larger local receipts and option offerings, with less demand, and the markets were dull, weak and lower in consequence. January wheat opened at \$1 and closed at 99½c. Options only 560,000 bushels. January corn opened at 45¼c. and closed at 44½c., and oats opened at 32c. and closed at 31¾c. Buckwheat grain was 60@63c. Rye grain was 56@57c. for Jersey and Pennsylvania on track, 58c. for No. 1 afloat, and 60@65c. for Nos. 1 and 2. Barley was in small demand at the following quotations: Two-rowed, 79c.; six-rowed, 80@83c.; No. 2 extra Canada, 85@86c., and No. 1, 88@90c., which is firmer. Malt was slow at the following figures: \$1.10@1.15 for city-made Canada; 90c. for two-rowed State; 98c. for six-rowed State. Mill-feed was slow at the following quotations: 70@72½c. for spring and 70@75c. for winter, 40, 60 and 80 lbs.; 80@90c. for middlings, 95c. for sharps, 80@82½c. for rye; screenings, 50@55c.; oil meal, \$1.45@1.50; cotton meal, \$1.25@1.28; barley meal 90c.

Wheat flour was in fair demand and steady, although export cables were weaker. The market on the whole was strong. Following are the quotations:

SPRING FLOUR.		
	Sacks.	Barrels.
No grade.....	\$2.00@2.25	\$....@....
Fine.....	2.25@2.50	2.60@2.90
Superfine .....	3.00@3.25	3.30@3.45
Extra No. 2.....	3.40@3.55	3.55@3.75
	New. Old.	New. Old.
Extra No. 1.....	3.80@4.50	3.90@4.50
	New. Old.	New. Old.
Clear .....	4.00@4.75	4.50@5.00
Straight .....	5.25@5.75	5.75@6.00
Patent .....	5.85@6.50	6.35@6.90

WINTER FLOUR.		
	Sacks.	Barrels.
No grade.....	\$2.00@2.25	\$....@....
Fine.....	2.60@2.85	2.80@3.00
Superfine .....	3.25@3.40	3.35@3.50
Extra No. 2.....	3.40@3.55	3.70@3.90
Extra No. 1.....	3.80@4.75	4.00@5.50
Clear .....	4.30@4.60	4.50@4.90
Straight .....	5.00@5.25	5.00@5.60
Patent .....	5.25@5.60	5.40@6.25

CITY MILLS.		
W. I grades.....	\$5.10@5.25	
Low grades.....	3.00@3.25	
Patents.....	6.00@6.75	

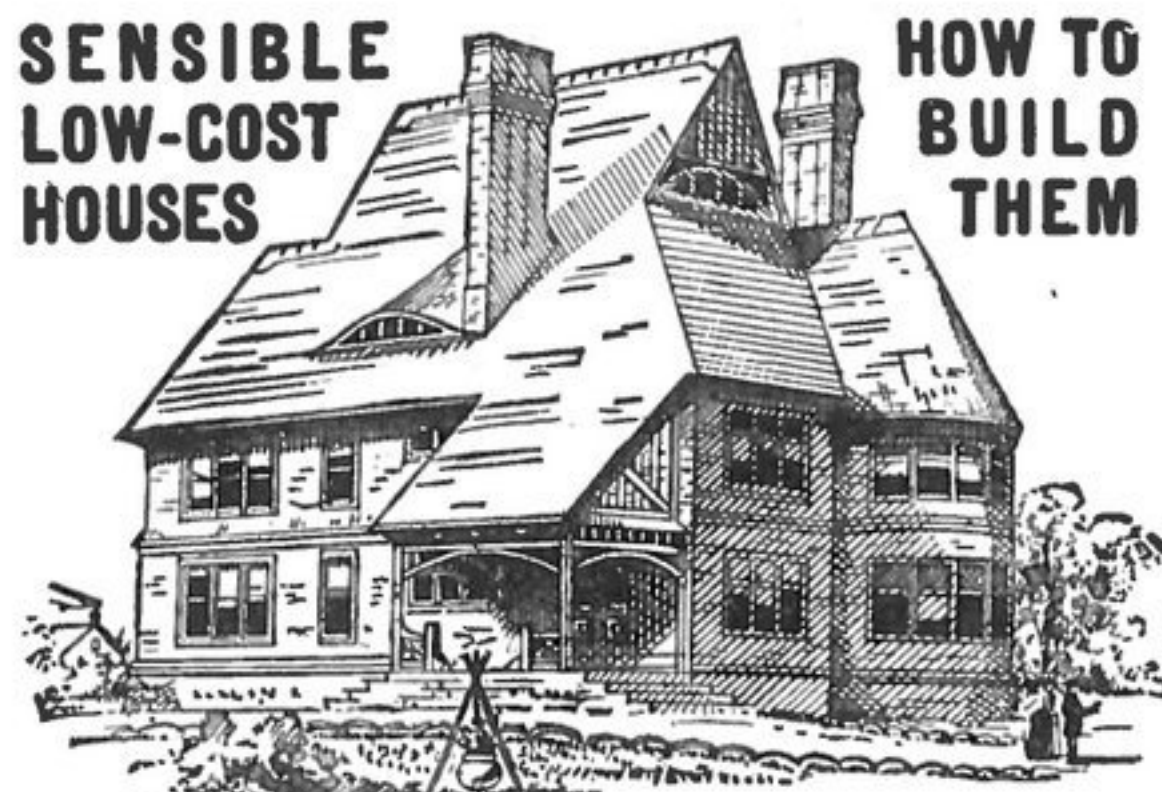
Rye flour was dull and weak at \$3.10@3.40, with fancy job lots at \$3.50. Buckwheat flour was dull at \$2@2.15 in bags. Corn products were dull and easier in sympathy with corn. Following are the quotations: Coarse meal, 85@87c.; fine yellow, \$1.00@1.03; fine winter, \$1.00@1.05; Western and Southern in barrels, \$2.85@2.90; Brandywine and Sagamore, \$3.00; granulated, \$3.15@3.50; grits, \$3.00@3.25; hominy nominal.

## BUFFALO MARKETS.

**FLOUR**—City ground—Patent spring, \$7.25@7.50; straight Duluth spring, \$6.75@7.00; bakers' spring, \$5.45@5.50; amber \$6.00@6.25; white winter, \$6.00@6.25. Western—Patent spring, \$7.25@7.50; Straight Minnesota Bakers', 6.75@7.00; clear do, \$5.25@5.50; white winter \$6.00@6.25; low grade flour, \$4.00@4.50; Graham flour, \$6.00@6.25; rye flour, \$4.00@4.25 per bbl. buckwheat flour, \$2.75 per 100 lbs. **OATMEAL**—Akron, \$6.45; Western, \$6.20 per bbl. **CORNMEAL**—Coarse, 90c.; fine, 95c.; granulated, \$1.75 per cwt. **WHEAT**—All private wires were down between here and Chicago, and no trading was done; Old hard close at \$1.35½, new \$1.27½; No. 1 northern \$1.19½; No. 2 northern \$1.15½, red winter wheat firm at \$1.05c; No. 1 scarces and nominal at \$1.08. **CORN**—Quie, sa'es & carloads No. 3 at 86½c, 1 do No 3 yellow at 88; quoted at 87½c at the close; No. 4 offered at 86½c. **OATS**—Steady; sale 2 carloads No. 2 white at 32c; No. 3 white 30@30½; No. 2 mixed 29c; State iron wagon 34@35c. **BARLEY**—Good grades in Canada and here rule firm; but there is plenty of common quality offering which is dull. No. 1, 82@83c; No. 2 78@80c; No. 3 extra, 75@76c; No. 3 65@74c. **RYE**—No. 2 Western held at 58c on track. **ELEVATING RATES**—Until further notice the charge for elevating, receiving, weighing and discharging sound grain will be ½ of a cent per bu as follows: For storing each ten days or parts thereof ¼ of 1 cent, per bu. No grain will be received for transfer. The above charge is to be paid by the consignee of the grain. **WINTER STORAGE**—After November 10, 1888, for each ten days, or part thereof, ¼c per bu until such charge (accumulated after the first ten days), shall amount to 2c per bu; then free until 5 days after the opening of canal navigation in 1889. On all grain in store before November 10, ¼c per for each

ten days, or part thereof, until such charge (accumulated after November 10), shall amount to 2c per bu; then free until 5 days after the opening of canal navigation.

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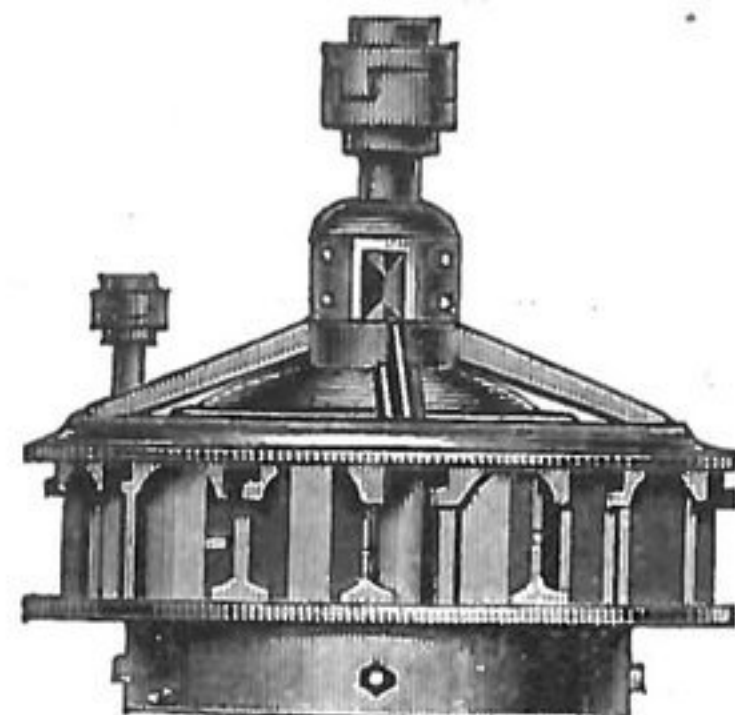
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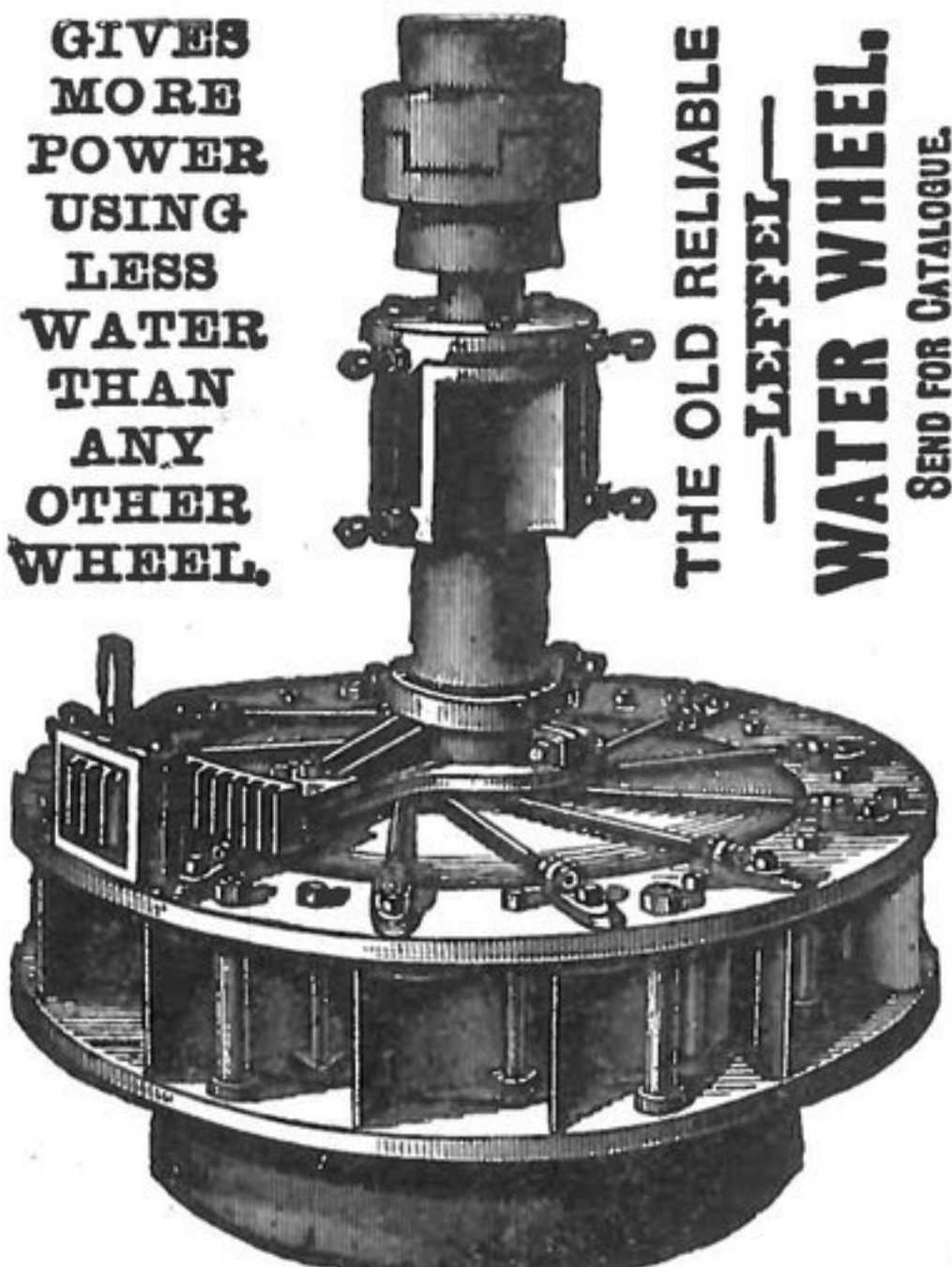
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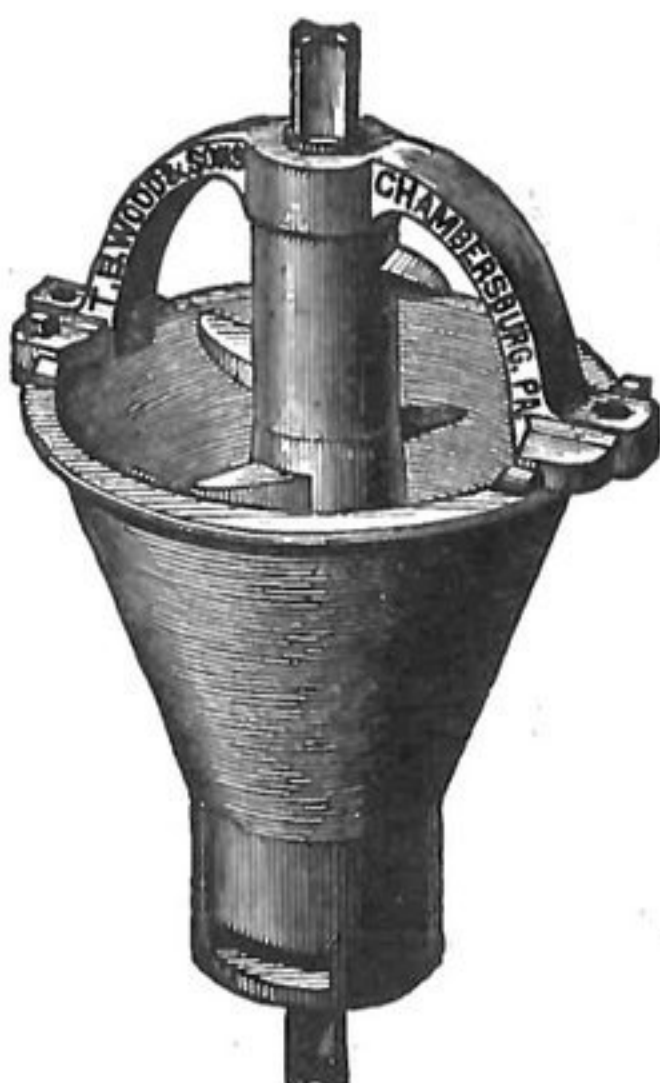
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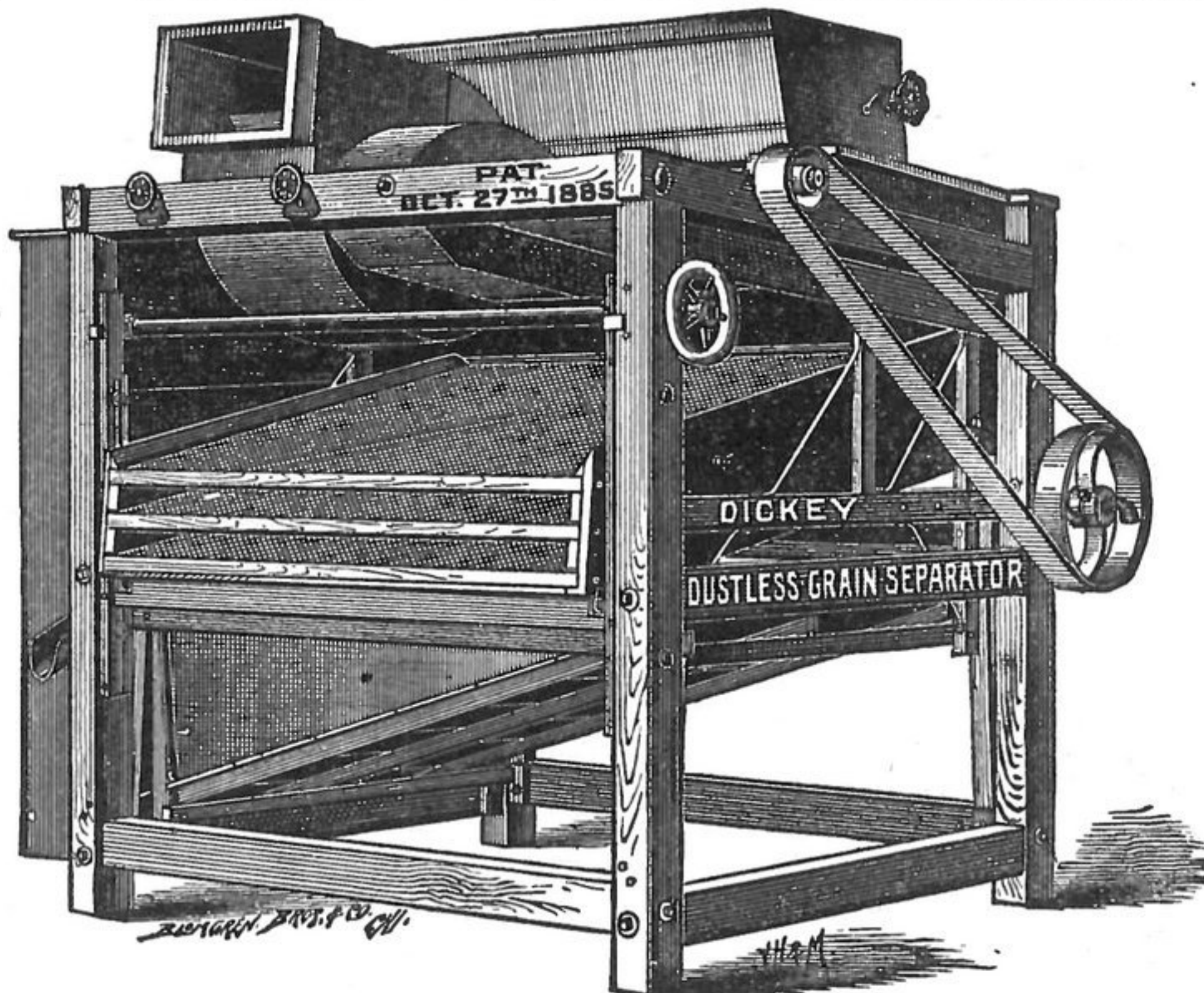
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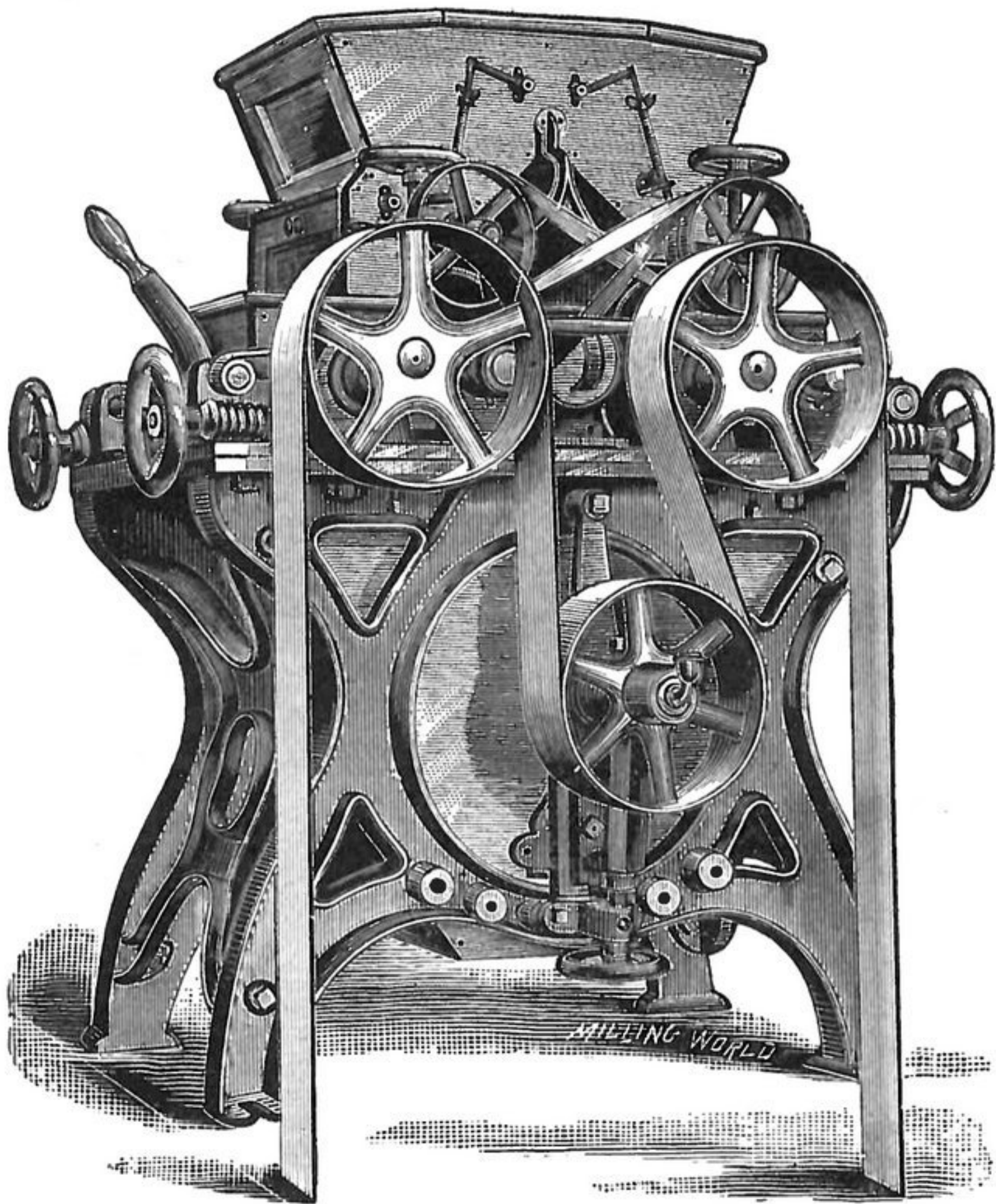
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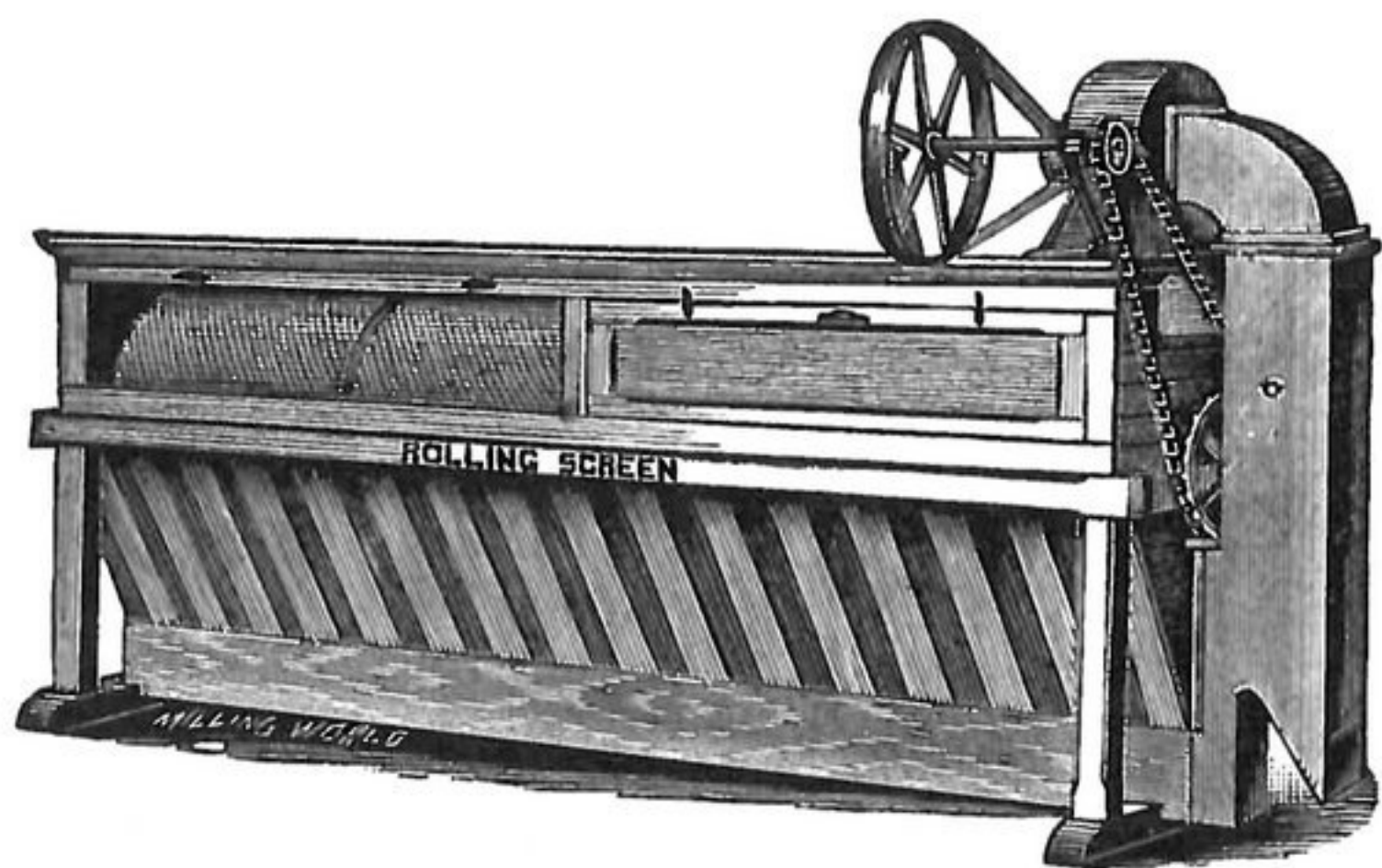
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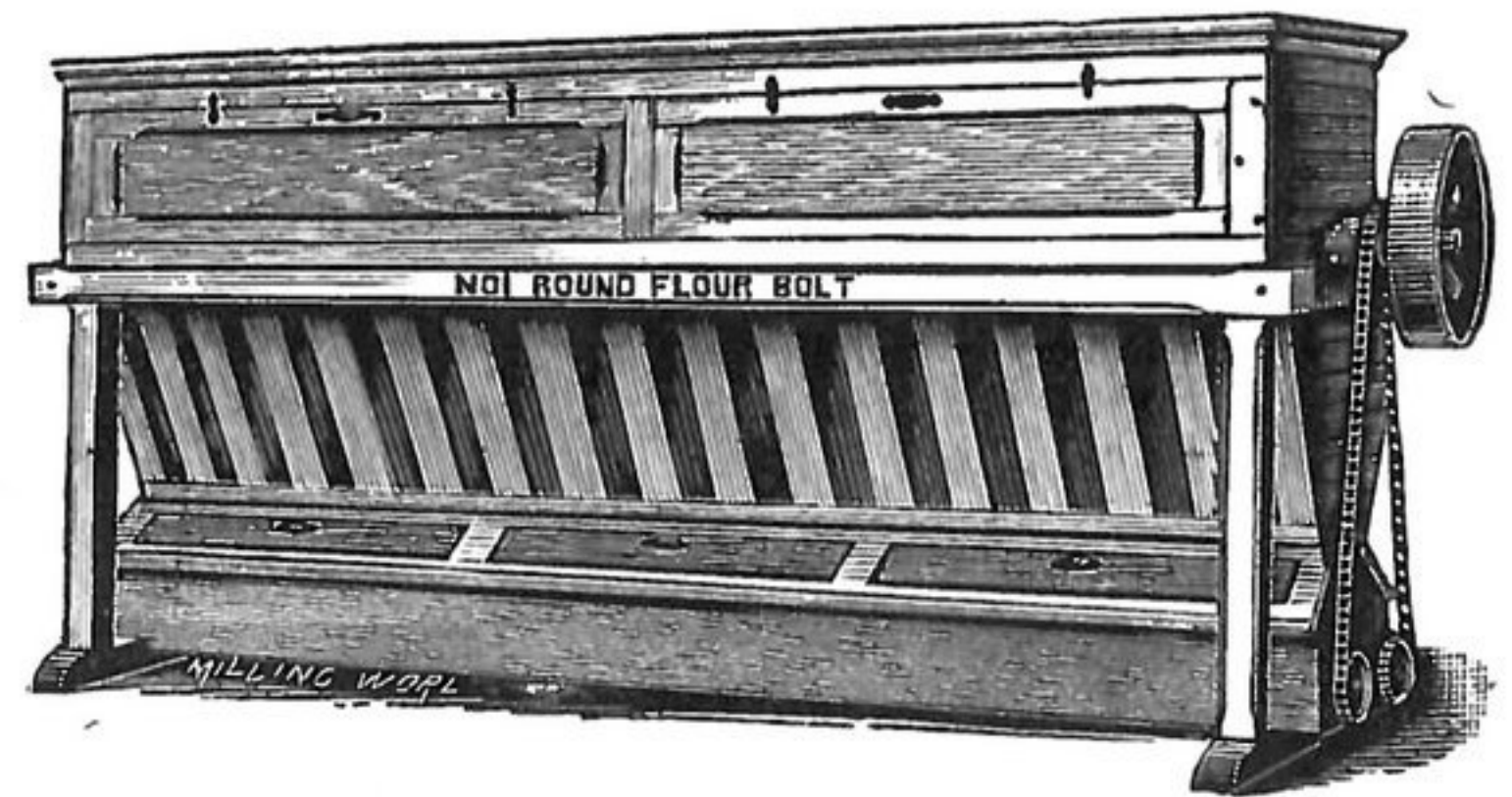
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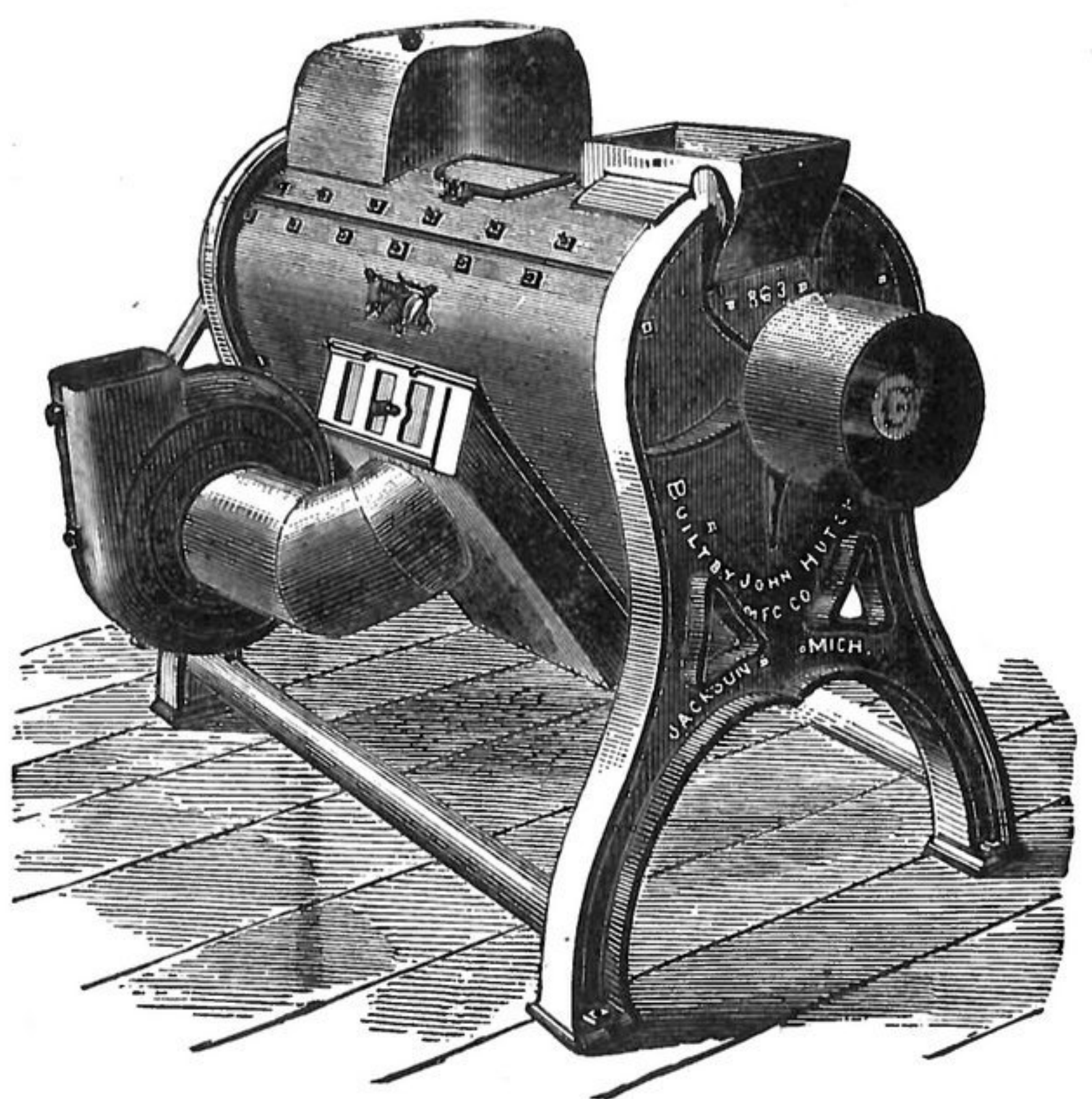


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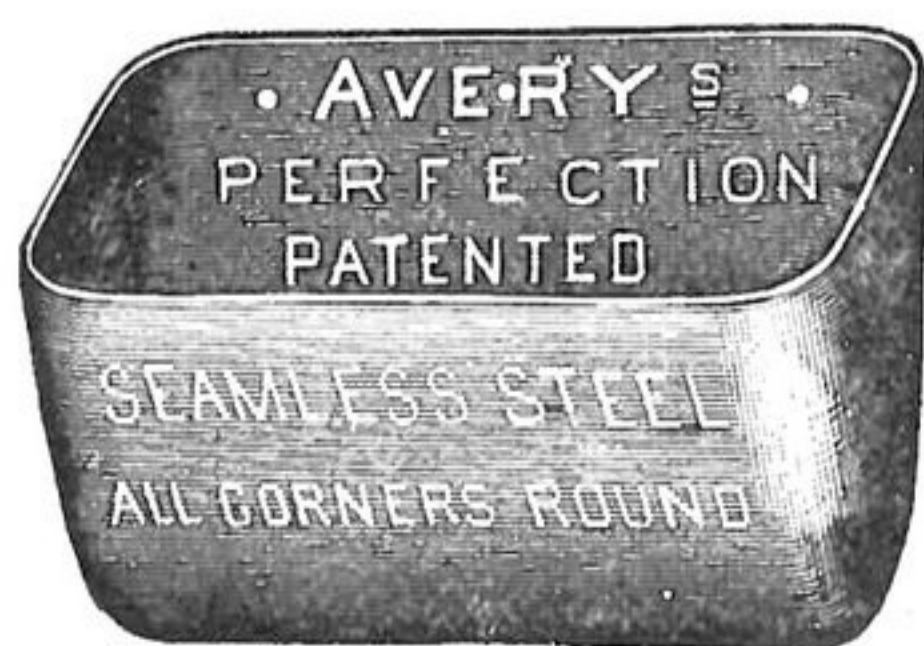
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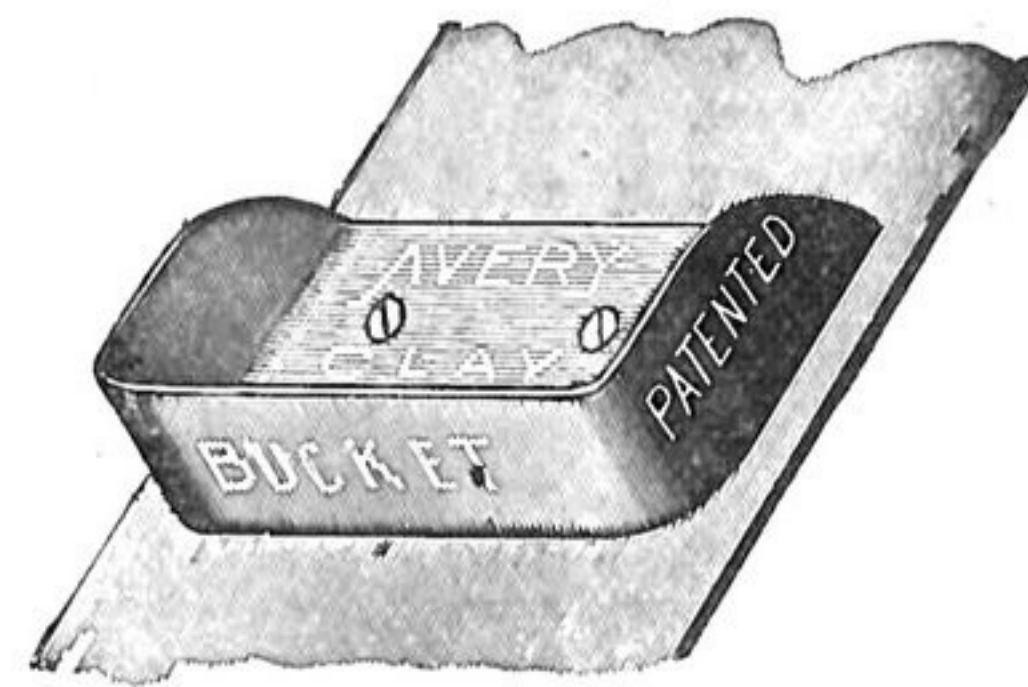


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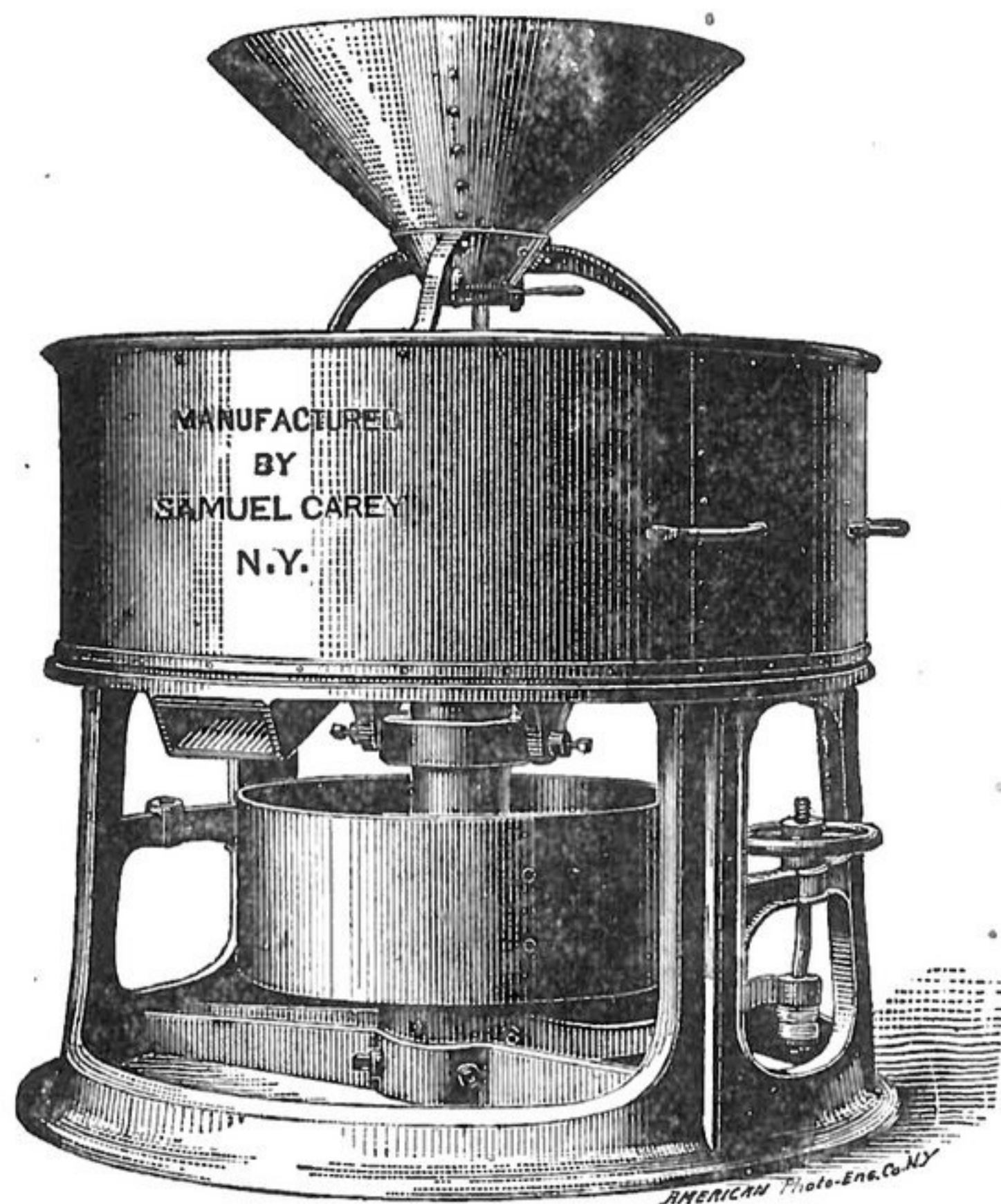
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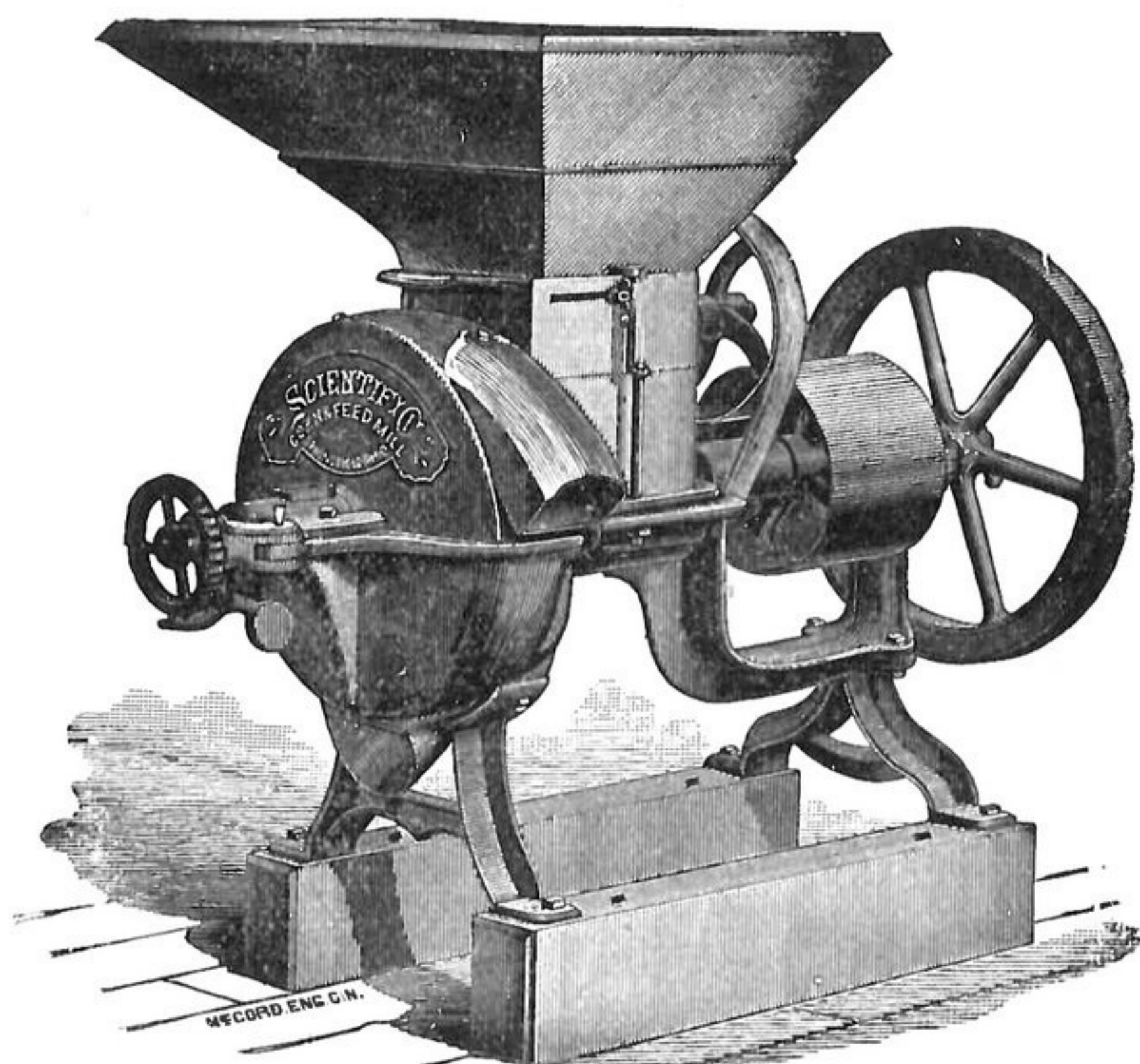
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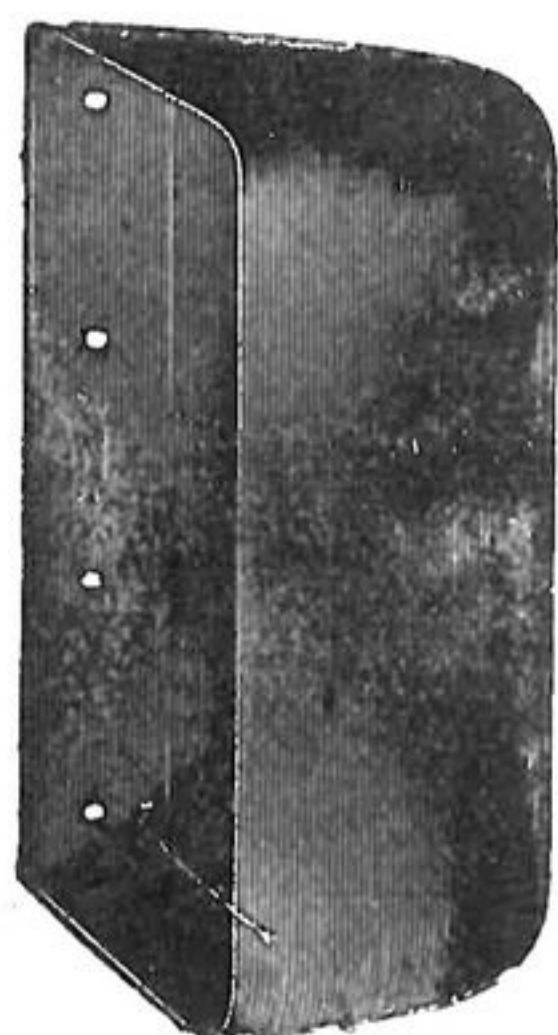
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